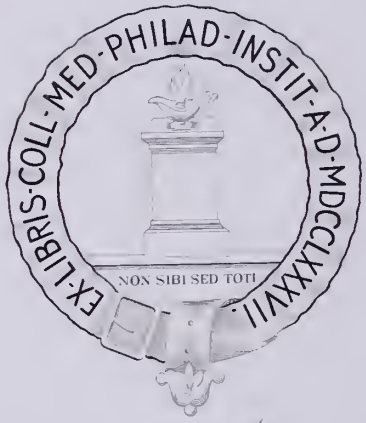
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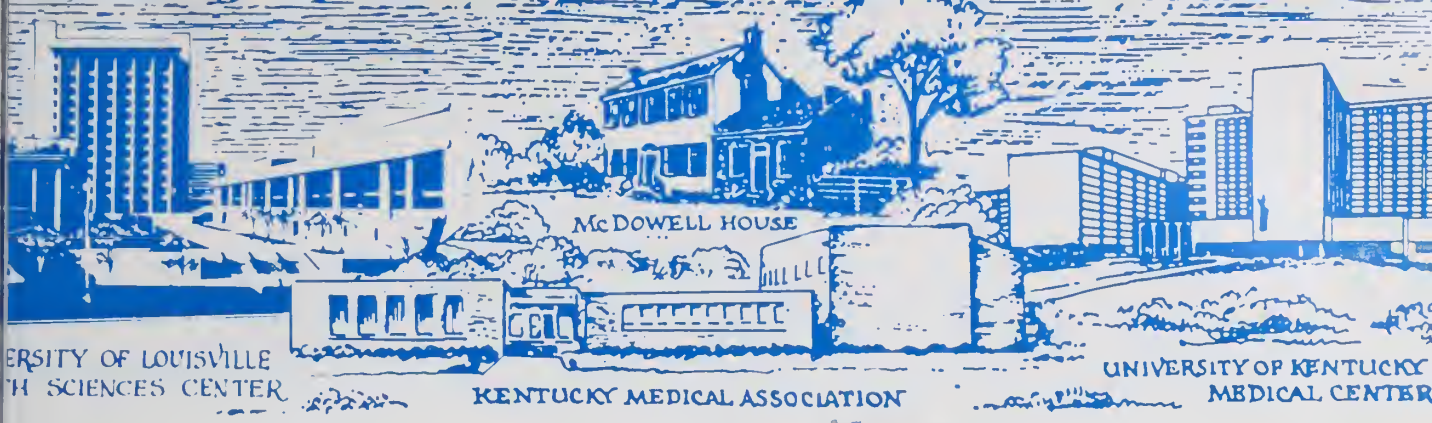
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The Journal of The KENTUCKY Medical Association

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Management of Massive Upper Gastrointestinal Bleeding
Ralph Giannella, M.D. 30

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LUME 74 JANUARY 1976 NUMBER 1

Both often



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

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anxiety states
with associated
depressive symptoms

rveillance because of their predisposi-
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ainst possible hazard.

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tients severely depressed, or with latent
pression, or with suicidal tendencies.
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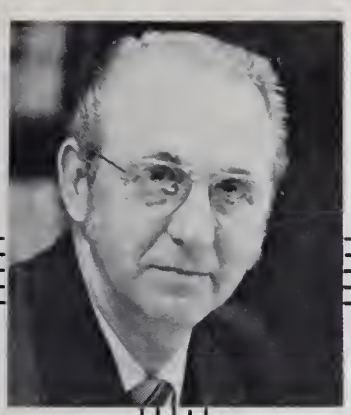
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MESSAGE FROM THE PRESIDENT



Aloha:

Having just returned from the AMA Clinical Meeting in Hawaii, I find it difficult to concentrate on the problems of medical practice or even to think of returning to the daily practice of medicine. However pleasant the trip may have been, the problems of medicine are still paramount and deserve our full consideration.

By virtue of being appointed to the position of Chairman of the KMA State Legislative Activities Committee, I have been requested to write the President's Page for *The Journal* this month.

On November 13th, the first meeting of the Committee was held and we have tried to get our objectives outlined. Our first priority will, of course, be the problem of Medical Liability Insurance and what legislation we may support to help ease or correct the situation. I imagine that most of you know by now that the Governor's Task Force on Medical Liability Insurance reported favorably on 15 of the 19 items which our House of Delegates passed in September and also agreed on some parts of the other items. We feel that this will give us a good position in proposing or supporting legislation to correct this problem.

While Medical Liability is our number one priority, we must not forget that each session of the Legislature brings forth many bills which are directly and sometimes indirectly related to the practice of medicine. We must not be blind to these other problems and so we hope to maintain our alertness.

KMA will have an office in Frankfort under the direction of our Director of Legislative Activities and many of us will work from that office during the Legislature. Please keep in mind that we need your assistance in contacting your representatives and all of us must share the responsibility for our success or failure.

We will be happy to have suggestions that may help us in our consideration of all legislative proposals and only ask that you please work through your KMA Legislative Activities Committee and not unilateral action which may be detrimental to our cause even though founded upon good intention. Your Legislative Activities Committee promises to work for your benefit to the best of our ability—your help will be appreciated.

I also would like to remind all KMA members that one of the best ways to protect medicine is to have legislators who are knowledgeable about medical problems. To do this we must elect good, intelligent men to office. KEMPAC offers all of us an opportunity to do our share for medicine as a whole. Regular membership is important but sustaining membership gives us more support money for our candidates. Now that our dues are again forthcoming, please add the additional check for KEMPAC.

CARL COOPER, JR., M.D., CHAIRMAN
COMMITTEE ON STATE LEGISLATIVE ACTIVITIES

This is the first in a series of articles written at the request of KMA President, David A. Hull, M.D.

A Link in the Chain

auxiliary

After three months in office, I am encouraged by our progress. I have traveled over 5,000 miles within the state and met many involved auxiliary members. All seem to be working hard on the two areas expressed as goals at the convention: **building understanding** and **serving a need.** Many counties are working on the Phoenix Project or Organ Donation described in the October issue on this page. Other community projects are assisting schools with screening for eye defects and learning disabilities, and education programs on nutrition, V.D., drug abuse, safety and child abuse. AMA-ERF contributions are coming in, but if you have not given please consider giving to your medical school through the AMA-ERF Fund. (A blank is found in this issue of *The Journal,* p. 35). The Auxiliary is a co-sponsor of the KEMPAC Workshop at the Ramada Inn in Louisville on January 15. Don't miss this informative meeting.

This year, the KMA Executive Committee has accepted our offer to assist them during the 1976 Kentucky General Assembly by asking for our help in the following ways:

1) *Help inform our husband's patients. HOW?*

An information package on professional liability insurance was mailed to each physician in the state during December. The Auxiliary should check on the displays of public information in the doctor's office, urging it be displayed if it is not. If material was not received, notify the Headquarters Office.

2) *Help inform the community. HOW?*

Posters are being placed by Auxiliary members in public areas such as drugstores, supermarkets, beauty shops or any other location in a community where there is a high volume of traffic. Posters are available from the AKMA Headquarters Office in Louisville.

3) *Help inform KMA Headquarters Office. HOW?*

The Auxiliary is maintaining a clipping service and sending all articles appearing in local newspapers concerning professional liability insurance to the Headquarters Office.

4) *Help in legislative activities. HOW?*

A Key Woman has been appointed to correspond with each Key Man appointed by KMA. She will stimulate the efficiency of the KMA Key Man system. Also by using the LEGS ALERT network, the Auxiliary will organize and conduct telephone and letterwriting campaigns on specific legislation as requested by the KMA Legislative activities committee.

If you live in an area where there is not an organized auxiliary, may I urge you to consider it at this time? We could coordinate the work better as it is almost impossible to correspond with a large number of individuals. Please contact me and I will help in any way possible.

Mark your calender now for April 5 and 6. I would urge your attendance at the Spring Board Meeting at Kentucky Dam Village State Park on these dates. All members are invited. The meeting will start about 1:00 p.m. CDT and end following lunch on April 6. Our fall meeting in Danville, focusing on the McDowell House, was well attended and a fruitful experience for all. Urge your wife not to miss this meeting.

MRS. WALLY MONTGOMERY, PRESIDENT
AUXILIARY TO KMA

Report From KMA Cancer Committee—

Cancer of the Uterine Cervix*

As recently as 1968 the estimated number of uterine cancers occurring each year in Kentucky was equal to the number of breast cancers.[1] By 1975 the situation had changed remarkably with the female population now having a higher probability for breast than for uterine cancer. Lacking evidence of an absolute increase in the incidence rates for breast cancer, we must assume the change to represent a decrease in uterine cancer. There is solid evidence from Jefferson County that the decrease in risk is entirely due to a dramatic drop in the incidence for cervix cancer. Carcinoma of the endometrium has, in fact, increased in frequency even after adjusting for aging of the population. It is the belief of the Committee, as well as others, that the marked decrease in cervix cancer is due to the cytologic screening of the population at risk. This has been carried out by the practicing physicians of Jefferson County since 1956. Coincidental with the drop in morbidity, has been a decrease in mortality of over 50% and for women under age 50 of over 61%. The Committee is satisfied that the same improvement will occur throughout the state, provided screening can be expanded.

There are several factors that favor uterine cancer as a prime target for the KMA. In its early phase of development, it is easily treated with a high probability of cure. Conversely, at Stages III and IV, it has a very bad prognosis and usually leads to a miserable death. The evolution of the disease is protracted over approximately a 15-year period, with accelerated growth only after invasion has occurred. Fortunately, unlike most other cancers, there is a reasonable method of detecting the lesion before symptoms occur. The Committee agrees that the only way significant benefits can occur is through the strong patient/physician relationship that exists throughout Kentucky.

Cervix cancer is somewhat unique in another respect. Women of highest risk are those least able to afford preventative medical care. In Jefferson County this factor has been successfully surmounted through the support of the State and County Health Department, the American Cancer Society and other agencies and organizations. The Committee thus believes that we can best obtain our statewide goal by integrating all resources, private and public.

In 1966 the Department for Human Resources, Bureau for Health Services, (formerly the State Department of Health) extended the existing program at Louisville General Hospital, which they have helped support since 1956, to other counties in Kentucky. The program is being implemented through local boards of health with the cooperation and support of practicing physicians throughout the state. Tests are provided by specially trained nurses of the local health departments for women in need. It is done with a full realization that a smear taken in conjunction with a thorough, bimanual pelvic examination by a physician is a more preferable method. The nurses all have a training period at Louisville General Hospital before returning to their home county. To date, nearly 250 public health nurses have been trained. The principles of obtaining a quality specimen are emphasized, namely: (1) prelabeling of slides, (2) inserting a non-lubricated spatulum, (3) bringing the cervix into optimal view and obtaining a scrape from the cervical os, avoiding scraping the lateral margin of the portio, (4) immediate fixation (this is perhaps the most important step), (5) a second smear obtained by either endocervical aspiration, or by inserting a cotton swab and rotating it in the cervical canal.

A sufficient number of pathologists in the state have agreed to evaluate the specimens at approximate cost, while maintaining rigid quality control methods. A follow-up program is operated by the State Bureau for Health Services to insure that histologic confirmation is obtained and that definitive treatment is carried out.

As previously mentioned, the great bulk of screening is, and must be done, through the physicians in private practice. The State Bureau for Health Services will in no way interfere with this, but only insures the same benefits for all the women of Kentucky. Last year 64,000 examinations were performed through the auspices of the state.

The Committee recognizes that Kentucky has a long heritage in pioneering uterine cancer control, and hopes to insure success by encouraging cooperation in utilizing all available agencies and resources, and by adding the considerable strength of the KMA backing.

1. Statistics on cancer: *Ca-A, Cancer Journal for Clinicians.* 18:13-24, 1968.

**This article was prepared by Wm. M. Christopherson, M.D. and C. Hernandez, M.D., M.P.H.*

CONTINUING MEDICAL EDUCATION

Accreditation Program

The Medical Education Committee, through its Subcommittee on Accreditation, conducted its first site visit for continuing education of a local organization on October 29. The Louisville Area Continuing Medical Education Consortium was visited by KMA site team members Frank R. Lemon, M.D., Lexington; D. Vertrees Hollingsworth, M.D., Georgetown; and Sam H. Traughber, M.D., Hopkinsville, along with three physician observers representing the AMA.

Participating organizations of the Consortium are ten Louisville hospitals, the Jefferson County Medical Society and the University of Louisville School of Medicine.

Site team members evaluated the Consortium's educational program on the basis of a written application and a series of meetings with their Program Director, Program Coordinator, Executive Steering Committee, and administrative and medical staff representatives of participating hospitals. Additionally, a portion of the program in progress was observed.

On the basis of their observations, a recommendation was made that the Consortium receive provisional accreditation for one year.

The purpose of the accreditation program is to encourage opportunities for CME at the local level. High quality of program content is assured by accreditation requirements which were approved by AMA and include such categories as proper administration, a sufficient stable budget, appropriate teaching staff, curriculae and facilities, proper educational methods and ways for evaluating the effects of the program.

Local groups interested in becoming accredited are urged to contact the KMA Office for further information or assistance in preparing the accreditation application.

* * * *

Physician's Recognition Award

The KMA Headquarters Office has been notified of Kentucky physicians who qualified for the AMA Physician's Recognition Award this year. Although the total number is not high in terms of the state's physician population, it does reflect a growing interest and participation in formal continuing education. For further information contact the KMA Office or the AMA's Department of Continuing Medical Education.

* * * *

Implementation of CME Program

Ongoing communication between KMA officials and the Board of Medical Licensure on continuing education requirements has resulted in the appointment of a study committee to implement the program tying CME to Licensure as approved by the House of Delegates in September, 1974.

Over the past two years, the Medical Education Committee and KMA Interspecialty Council have solicited educational requirements for the program from specialty groups. Although all groups have not yet responded, the KMA Board asked the Licensure Board to proceed with putting the program into effect in the interest of timeliness. "General" educational requirements developed by the Education Committee were suggested for use for specialists whose groups did not respond.

Because of many administrative questions, the Licensure Board has appointed an advisory group consisting of three members of their Board, three members of the Medical Education Committee and representatives of the UL and UK medical schools to finalize implementation plans.

It is anticipated that mass informational mailings and open hearings will be undertaken before the program formally begins.

Because of the general interest in continuing medical education and the increasing involvement of KMA in CME activities, the Medical Education Committee has felt that a periodic report on its activities would be helpful to the membership. This page will not appear routinely, but only as necessary. For additional information on any of the items that appear, please contact the Headquarters Office.

POSTGRADUATE OPPORTUNITIES

IN KENTUCKY

JANUARY

15 KEMPAC/AMPAC Political Workshop, Ramada Inn, Bluegrass Convention Center, Louisville

28 "Optimal Use of Blood Products," **Health Sciences Center, University of Louisville, Louisville

FEBRUARY

13-14 2nd International Symposium on Psychopharmacology, University of Louisville, Health Sciences Center, Louisville

22-28 Sixth Family Medicine Review, Session III,* Registration fee: $245. University of Kentucky Medical Center, Lexington

25 "Pre- and Postoperative Pulmonary Problems,"** Health Sciences Center, University of Louisville School of Medicine, Louisville

MARCH

18 "Medical-Surgical Complications in Diabetes,"** Health Sciences Center, University of Louisville School of Medicine, Louisville

24 "Management of Gastrointestinal Bleeding,"** Suburban Hospital, Louisville

31-April 1 22nd Symposium on Cardiovascular Diseases, Heart Association of Louisville and Jefferson County, Health Sciences Center, Louisville

APRIL

12-14 "Frontiers of Medical Science: The Clinician as Translator," American College of Physicians and University of Kentucky College of Medicine. Contact: Registrar, Postgraduate Courses, ACP, 4200 Pine Street, Philadelphia, Pa. 19104.

22-26 "Modern Management of Major Problems in Surgery," University of Louisville School of Medicine. Contact: Hiram C. Polk, Jr., M.D., Department of Surgery, University of Louisville, Health Sciences Center, Louisville 40201.

22-24 "Diagnosis and Management of High Risk Pregnancy,"** Health Sciences Center, University of Louisville, Louisville

23-24 "Management of Diabetic Complications,"* University of Kentucky Medical Center, Lexington

28 "Cardiac Drugs,"** Health Sciences Center, University of Louisville, Louisville

28-30 "Gastrointestinal Radiology Symposium,"* University of Kentucky Medical Center, Lexington Hilton Inn, Lexington

IN SURROUNDING STATES

JANUARY

14-15 "Surgical Technics, 'How I Do It,' " Cleveland Clinic Educational Foundation, Cleveland

23-25 AMA National Leadership Conference, Chicago Marriott Motor Hotel, Chicago

28-Feb. 1 American College of Psychiatrists, del Coronado Hotel, Coronado, Calif.

30-Feb. 1 AMA Congress on Medical Education, Palmer House, Chicago

31-Feb. 4 American Academy of Orthopedic Surgeons, Marriott-Rivergate, New Orleans

MARCH

11-13 "Gynecologic Endocrinology," University of Tennessee Center for the Health Sciences, Hilton Inn-Memphis Airport, Memphis. Contact: James R. Givens, M.D., 800 Madison Ave., Memphis, Tenn. 38163.

19-20 "Colonoscopy Techniques and Application," Cleveland Clinic Educational Foundation, Cleveland

1976

MARK YOUR CALENDAR

June 2-3, Emergency Health Care Seminar, Executive West, Louisville

June 26-July 1, AMA Annual Convention, Dallas

September 27-30, KMA Annual Meeting, Ramada Inn, Bluegrass Convention Center, Louisville

For further information, contact: Frank R. Lemon, M.D., Associate Dean of Extra-Mural Affairs, UK College of Medicine, Lexington 40506

**For further information, contact: Gerald D. Swim, Director, Office of Continuing Education, UL School of Medicine, Louisville 40202*

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Estrogens may be excreted in the mother's milk and an estrogenic effect upon the infant has been described. The long range effect on the nursing infant cannot be determined at this time.

Hypercalcemia may occur in as many as 15 percent of breast cancer patients with metastases, and this usually indicates progression of bone metastases. This occurrence depends neither on dose nor on immobilization. In the presence of progression of the cancer or hypercalcemia, estrogen administration should be stopped.

A statistically significant association has been reported between maternal ingestion of diethylstilbestrol during pregnancy and the occurrence of vaginal carcinoma in the offspring. This occurred with the use of diethylstilbestrol for the treatment of threatened abortion or high risk pregnancies. Whether or not such an association is applicable to all estrogens is not known at this time. In view of this finding, however, the use of any estrogen in pregnancy is not recommended.

Failure to control abnormal uterine bleeding or unexpected recurrence is an indication for curettage.
Precautions: As with all short acting estrogens, the following precautions should be observed:

A complete pretreatment physical examination should he performed with special reference to pelvic and breast examinations.

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Because of salt and water retention associated with estrogenic anabolic activity, estrogens should be used with caution in patients with epilepsy, migraine, asthma, cardiac, or renal disease.

If unexplained or excessive vaginal bleeding should occur, reexamination should be made for organic pathology.

Pre-existing uterine fibromyomata may increase in size while using estrogens: therefore, patients should be examined at regular intervals while receiving estrogenic therapy.

The pathologist should be advised of estrogen therapy when relevant specimens are submitted.

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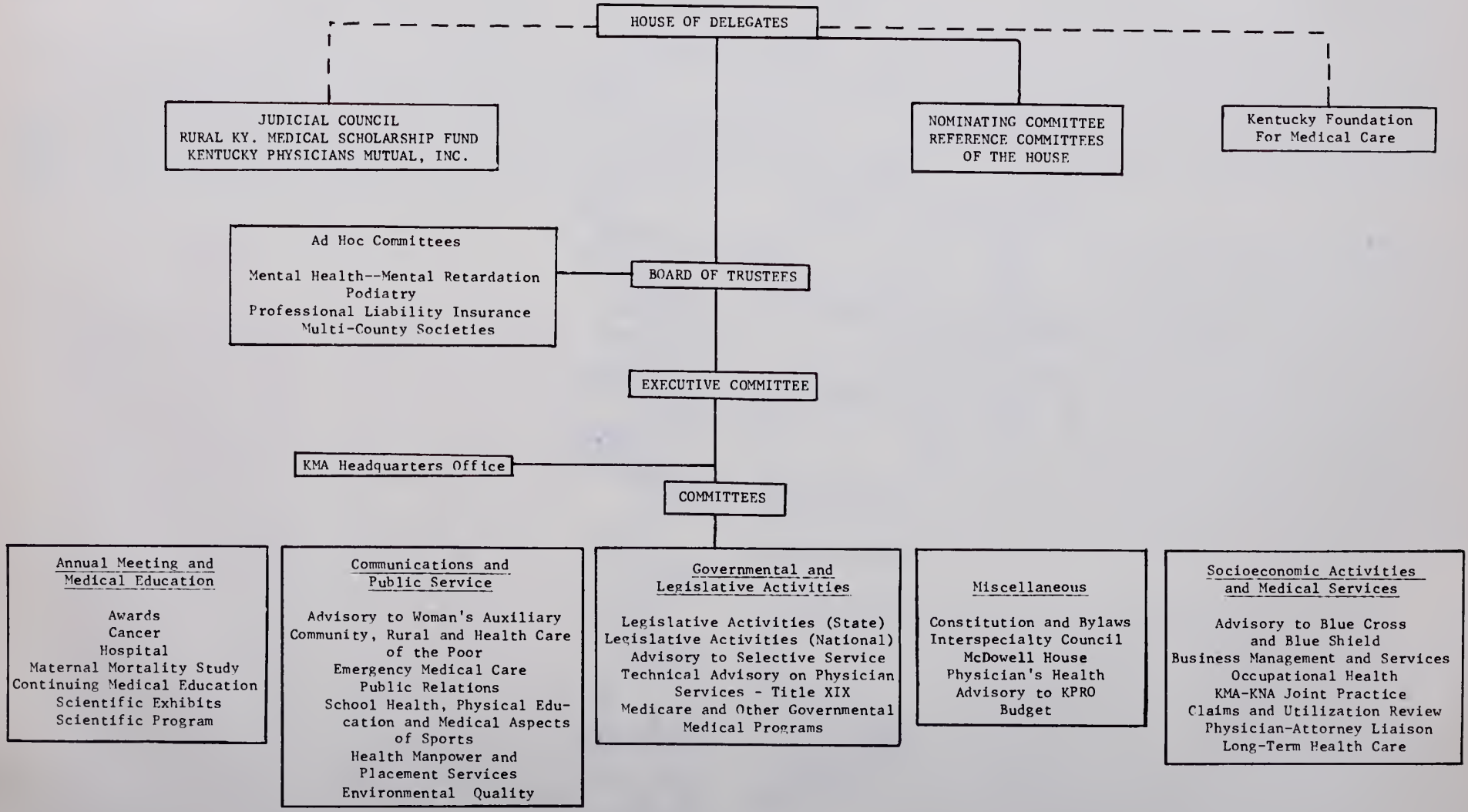
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VOLUME 74 JANUARY 1976 NUMBER 1

Review of Diagonsis and Surgical Treatment of Patent Ductus Arteriosus Associated with Neonatal Respiratory Distress Syndrome*

LAMAN A. GRAY, JR., M.D.
Louisville, Kentucky

The idiopathic respiratory distress syndrome in the premature infant carries a high mortality. Indeed this is the most common cause of death in this age group.

OUT of 12,487 live births in Jefferson County in 1973, approximately 875 were premature infants. One hundred and fourteen of these premature infants had idiopathic respiratory distress syndrome and about one half of these died of the disease. The problem then is not an uncommon one for the practitioner.

Great improvement in the care of these infants has been made in the past few years with the advent of intermittent positive pressure ventilation and continuous positive pressure breathing. With these supportive techniques, some infants are able to survive the initial stages of the disease without sequelae. Unfortunately, many of these infants with respiratory distress syndrome cannot be weaned from the ventilator.

Pediatricians have noted an increased association between the respiratory distress syndrome and patent ductus arteriosus. Clinically it frequently appears that the respiratory distress syndrome becomes much more severe about the time a ductus murmur is heard. This is felt to be due to superimposed congestive heart failure upon an already diseased lung. Since 1972, several investigators have reported that ligation of a patent ductus arteriosus in those premature infants with respiratory distress syndrome has been beneficial (Figure 1).

Diagnosis

The diagnosis of patent ductus arteriosus in a premature infant may be made on clinical grounds (Table 1). A systolic murmur is located at the pulmonic area and radiates along the left sternal border. The murmur is frequently continuous. The infants have bounding pulses and a hyperactive precordium. The electrocardiogram is frequently normal and the chest roentgenogram reveals an enlarged heart with increased vascularity. In infants with respiratory distress syndrome, changes in vascularity are difficult to interpret because of the underlying lung disease.

A majority of infants with respiratory distress syndrome have difficulty initiating respirations at birth. On physical examination, these infants are in obvious respiratory distress with retraction and cyanosis. Auscultation of the lungs reveals normal air exchange with fine rales at both bases. Roentgenographically, the

*From the Division of Thoracic and Cardiovascular Surgery, Department of Surgery, University of Louisville School of Medicine, Louisville
Paper submitted: 11-24-74, Revised: 9-8-75

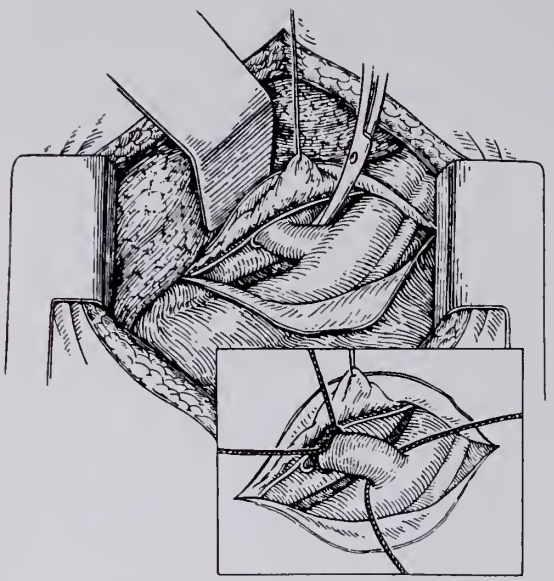


FIG. 1. Technique of ligation of a patent ductus in the premature infant.

lungs have a fine granular appearance (Figure 2). On examining the lungs, they are purplish red and liver-like in consistency. Microscopically, extreme atelectasis with engorgement of intra-alveolar capillaries can be seen. The alveoli and bronchioli are lined with an acidophilic homogeneous membrane.

Treatment

In the absence of specific therapy, the treatment of respiratory distress syndrome is essentially supportive, including maintenance of normal body temperature, acidbase balance, fluid and electrolyte balance, adequate caloric intake and most importantly, adequate oxygenation. Treatment of hypoxia remains a *sine qua non* of management. The inspired oxygen concentration must be high enough to relieve cyanosis or to obtain a PaO_2 above 50 mm Hg. The infants must also be able to maintain adequate ventilation or a $PaCO_2$ below 60 mm Hg. If these cannot be accomplished, then positive pressure ventilation is mandatory (Table 2).

With the advent of positive pressure ventilation, many of these infants who otherwise would have succumbed may live. However, certain infants despite excellent respiratory regimes fail to improve and pulmonary function progressively deteriorates. This deterioration frequently occurs at the same time a ductus murmur is heard. Superimposed congestive heart failure further compromises the pulmonary reserve. When this occurs, the infant should be treated for congestive heart failure by digitalization and adequate diuretics. If these medical measures do not relieve the failure and improve the respiratory status, surgical closure of the patent ductus arteriosus is indicated.

Discussion

One hundred and twenty-seven cases of idiopathic respiratory distress syndrome associated with a patent ductus arteriosus were found in a survey of recent literature.[1-9] Of these, 118 underwent operation. Early (operative and postoperative) mortality averaged 5% and late (more than one week postoperative) mortality was 33%. Of the 64 survivors, 84% developed normally.

This data can be more closely scrutinized. Murphy and co-workers[8] reviewed 45 cases of respiratory distress syndrome in infants. Of these, 73% developed a murmur consistent with a patent ductus. Thirty-three cases were treated medically. Seven developed congestive heart failure and required digitalis and diuretics for control. Although most of these infants responded quickly, one out of the group died in refracted congestive heart failure. Ten other infants required surgical ligation of the ductus because of the progressive respiratory difficulties associated with severe failure despite medical management. There was a 50% operative mortality but if the infants survived, they were normal. All infants with respiratory distress syndrome and a patent ductus arteriosus do not require operation; in fact, the majority can be treated medically.

A major factor in analyzing the results of operations in patients with respiratory distress syndrome and a patent ductus arteriosus is the severity of the lung disease. Gay and others[2] described 30 infants with severe respiratory distress syndrome requiring mechanical ventila-

Table 1

DIAGNOSIS OF PATENT DUCTUS

1. Systolic murmurs over pulmonic area—usually continuous
2. Bounding pulses
3. Hyperactive precordium
4. EKG may be normal
5. Chest roentgenogram
   A. Cardiomegaly
   B. Increased vascularity

tion. All in this group became clinically worse with the development of a ductus murmur. Because there was no improvement with medical management, they underwent ligation of the ductus. The operative mortality was 50%. An additional 15 patients with less severe respiratory distress syndrome who did not require mechanical ventilation also developed a ductus murmur. Because these infants were becoming worse despite adequate medical management for their failure, they also underwent ligation of the ductus. The operative mortality in this group with less severe respiratory disease was decreased to 6%. Obviously, the infants requiring ventilatory support have a more severe form of the respiratory distress syndrome and a high associated operative mortality.

There is a relationship between the duration of large volume shunting and development of irreversible lung disease. Gay and others[2] ligated the ductus of 10 infants requiring respiratory support having a shunt murmur present for an average of 4.9 days preoperatively. All these developed irreversible lung disease with a 90% mortality. However, in a similar group of patients with ductus present for an average of only 1.5 days before ligation there were no deaths and there was minimal chronic lung disease as the infants grew older. These findings suggest that not only is the degree of left to right shunting important, but also that the duration of the shunt prior to ligation is important in the ultimate fate of the infants.

Table 2

TREATMENT OF RESPIRATORY DISTRESS SYNDROME

1. Maintenance of normal body temperature
2. Acid-base balance
3. Fluid-electrolyte balance
4. Adequate caloric intake
5. Adequate oxygenation

Summary

The finding of a patent ductus arteriosus in an otherwise healthy infant may be incidental. These patients can be treated medically and a majority of the ductus will close spontaneously. However, the ductus may appear at the same time the infant with respiratory distress syndrome begins to deteriorate. With appropriate medical management, the clinical situation will either improve and the infant's respiratory distress lessen or the infant will continue to deteriorate. It is in the last group of infants that ligation of the ductus is indicated (Table III).

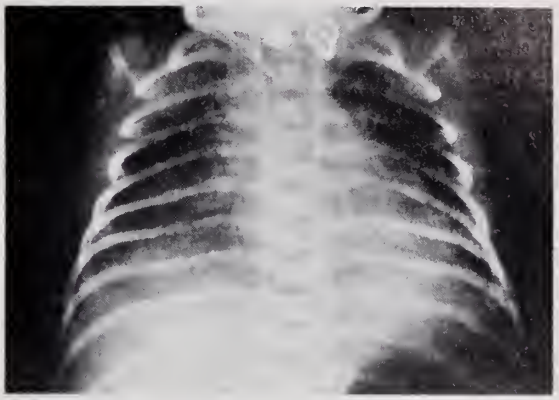


FIG. 2. Radiographic appearance of the lung in an infant with respiratory distress syndrome demonstrating a reticulogranular appearance and air bronchograms.

Nevertheless, the decision to ligate a patent ductus in the infant with respiratory distress syndrome is a difficult one. Indications for ligation include progressive deterioration of pulmonary function associated with a systolic murmur along the left sternal border, bounding peripheral pulses, the onset of congestive heart failure unresponsive to medical management, signs of deterioration on chest x-ray, a fall in the PaO_2, a rise in the $PaCO_2$ above 60 mm Hg and severe apnea when off the respirator. The most valid indication of worsening respiratory function is the rise in arterial carbon dioxide content and fall in arterial oxygenation.

The length of time an infant with respiratory distress syndrome and congestive heart failure should be treated medically is not known. Naturally, there is some reluctance to intervene surgically when a large percentage of these ductus will close spontaneously. However, it is easy to wait too long. The respiratory distress syndrome may rapidly progress to an irreversible state. Most authors believe that the infant should be treated medically no longer than

Table 3

RESPIRATORY DISTRESS SYNDROME AND PATENT DUCTUS ARTERIOSUS

Indications for ligation of ductus

1. Systolic or continuous murmur
2. Bounding peripheral pulses
3. Deterioration of pulmonary function
4. CHF unresponsive to medical management
5. Signs of deterioration on chest x-ray
6. Fall in P_aO_2
7. Rise in P_aCO_2 above 60 mm Hg
8. Severe apnea when off respirator

three to four days. If substantial improvement in the clinical course does not occur, then surgical ligation of the ductus should be performed. Surgical ligation is the only potentially effective therapeutic course available. If the operation is not delayed too long, we can expect a salvage rate of approximately 50% in an otherwise hopeless situation.

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Special Screening for Hemoglobinopathies*

Marie M. Keeling, M.S., M.D., William B. Lockwood, Ph.D., M.D. and Estus A. Harris, M.T.

Louisville, Kentucky

Special screening by sophisticated methods to detect hemoglobinopathies among a selected patient population at Louisville V.A. Hospital revealed that an abnormal variant may be important in the pathogenesis of diverse disease states.

IN 1972, a special hemoglobin unit was formed in the clinical laboratory at the Louisville V. A. Hospital. Designed to screen a selected patient population of veterans, it has utilized the most sophisticated methods currently available for the determination of hemoglobin profiles.[1] These include: starch gel electrophoresis of specially prepared hemolysates; column chromatographic separation and quantitation of abnormal variants; ferrohemoglobin solubility tests (to characterize S): heat stability; fetal hemoglobin by chemical methods; and, when indicated, oxygen equilibrium studies on hemolysates.

The population under scrutiny has been any individual with an **unexplained** hemolytic state, absolute erythrocytosis, cyanosis or anemia and certain ethnic groups classically rich in abnormal variants, especially the Black race. Besides these groups, referrals from outside physicians have been accepted if there is a serious question that a hemoglobinopathy might be implicated in the pathogenesis of a disease. Investigation of the family of a veteran with an abnormal variant has also been conducted when appropriate as in study of the thalassemia states.

In a two-year period, 645 complete profiles were determined. This involved 545 veterans and 100 non-veterans. The average age of the persons studied was 42 years. The predominance of males and Black people in the group (Figure 1) was due to the population evaluated. The same figure discloses the rewarding feature of an overall 15% abnormality. Indeed, this too is a reflection of the design of the investigation.

Figure 2 fractionates the abnormal variants of the total population into specific groups. The most obvious abnormality was the expected Hb S trait.

Figure 3 is even more specific in its division of the hemogloblinopathies according to categories of Blacks and Caucasians. The incidence

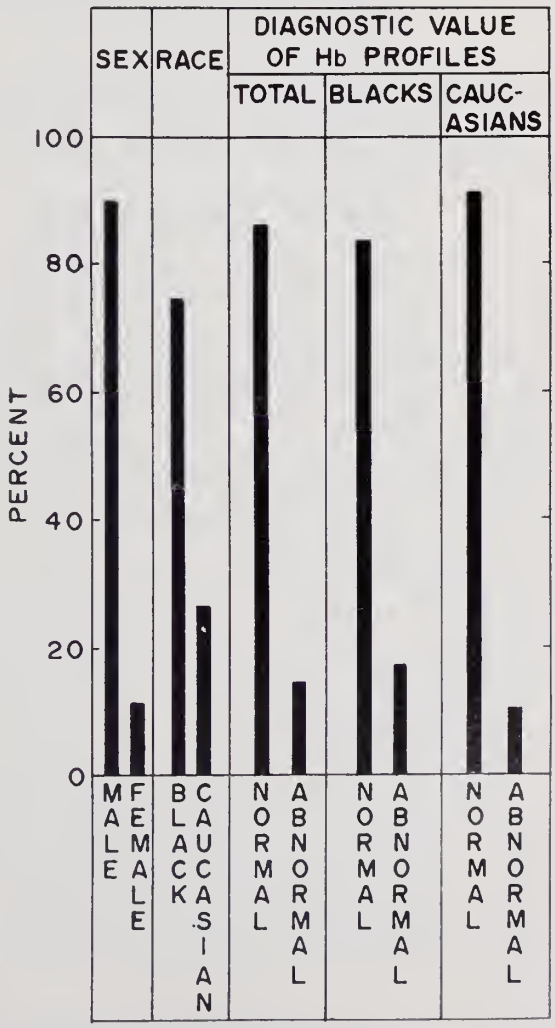


FIG. 1: Percent of screened population as to sex, race and hemoglobinopathies.

*From the Hemoglobin Unit, Clinical Laboratory, Department of Pathology, V.A. Hospital, Louisville. Supported by V.A. Research Grant.

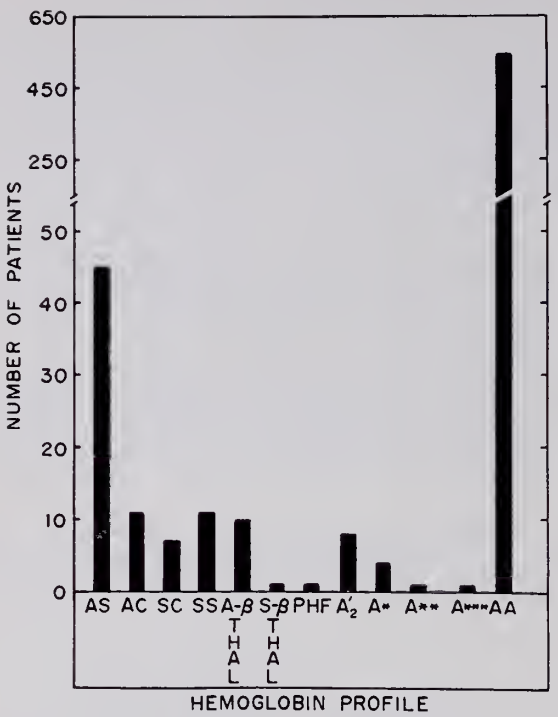


FIG. 2. Total number of patients demonstrating various hemoglobin profiles.

*hemoglobin with increased oxygen affinity
**hemoglobin Louisville
***unidentified unstable hemoglobin

of 8.6% sickle trait (Hb AS), 2.3% sickle cell anemia (Hb SS) and 2.3% C trait (Hb AC) in blacks agrees substantially with those of most comprehensive surveys conducted in the United States.[2] Hb A_2 prime (HbA_2) and heterozygous persistent high fetal hemoglobin (PHF), both relatively rare variants neither of which produces disease, were found in 1.6% and 0.2% respectively of the Blacks tested. One and four tenths percent of the Black population harbored Hb SC which is often symptomatic because of repeated thrombotic episodes. β thalassemia trait was present in 1.5% of the total cases, occasionally in those Caucasians of non-Mediterranean extraction.

Some interesting developments occurred during this period. A 22-month-old Caucasian female was referred by a pediatrician out in the state because of severe unexplained hemolytic anemia. She was documented as being heterozygous for hemoglobin Louisville, an unstable variant reported in her father prior to her birth.[3]

Conversely, an unexplained, marked polycythemia (erythrocytosis) brought a 22-year-old Caucasian male for study. He was found to be heterozygous for an abnormal variant with an increased oxygen affinity, which accounted for the erythrocytosis in him, his mother and two siblings, all of whom harbor this mutant. Amino acid analysis revealed a previously reported hemoglobinopathy. Such situations in which an abnormal hemoglobin has been the cause of polycythemia are not rare.[4]

In a 20-year-old Caucasian male, bilateral avascular necrosis of both femoral heads coexisted with sickle cell trait which presumably was involved in the pathogenesis of the orthopedic problem.[5] Currently all cases of "idiopathic" avascular necrosis of bone in three hospitals including the V. A. are being studied for an underlying hemoglobinopathy.

It is worthy of note that the incidence of abnormal variants, while dependent on the population studied, has been estimated at 5/1000 in an "unloaded" mixed European population.[6] Many of these hemoglobins that cause disease will not be uncovered in routine procedures like sickle testing or even by conventional electrophoresis on cellulose acetate, such as is used in most clinical laboratories. Some of the unstable group and the mutants with increased oxygen affinity migrate in an electrophoretic field exactly like normal adult hemoglobin A. Other techniques must be used for their detection. The V. A. group is able to

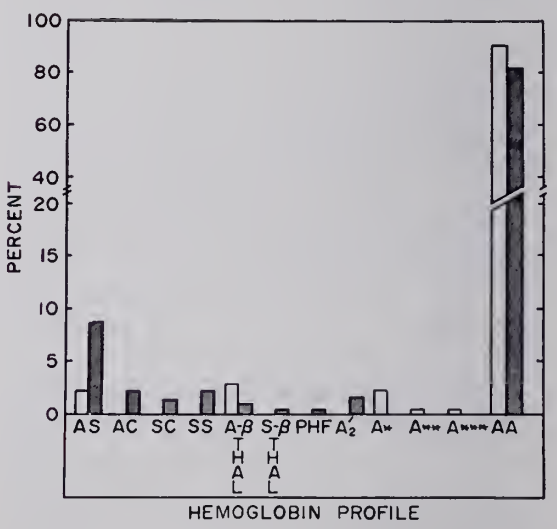


FIG. 3: Percent of various hemoglobins in the total screened population of Caucasians (open bars) and blacks (hatched bars).

*hemoglobin with increased oxygen affinity
**hemoglobin Louisville
***unidentified unstable hemoglobin

a hemoglobin completely, stopping short of amino acid analysis and even this is able to them when indicated.

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Psychosomatic Aspects of Gastrointestinal Complaints†

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A BELIEF that the colon and the cortex are linked is not new; Burton in his book, *The Anatomy of Melancholy,* written in 1651 observed that depressed people experienced "besides fear and sorrow, sharp belchings, fulsome crudities, heat in the bowels, wind and rumblings in the guts, vehement gripings, pain in the belly and stomach . . . they cannot endure their own fulsome belchings . . . midrift and bowel are pulled up".

From the opening of the esophagus to the outlet of the rectum, from functional dysphagia to proctalgia fugax, there is no portion or function of the gastrointestinal tract that has not been coupled in some manner with psychological factors. Vomiting, ulcers, regional enteritis, constipation, colitis and irritable colon are some of the disorders in which psychiatrists have dabbled. So far they have failed to justify their interests. A professor of surgery (Shields) recently concluded a comprehensive review of the psychosomatic aspects of ulcerative colitis[3] with the remark that "without doubt individual patients can be helped from time to time by the psychiatrist, but psychiatry has not yet established its right to be present in the treatment schedule."

Attempts to show that psychological factors are either sufficient or necessary to cause or sustain disease of the gastrointestinal tract have usually succeeded only in demonstrating what Shields stated—that some individuals with these disorders are clearly more anxious, attention seeking or prone to make physical complaints than a control comparison group. Psychiatrists, perhaps from frustration, have tended to label such individuals hysterical, hypochondriacal or passive dependent personality types whose allegedly unfulfilled oral needs are gratified through relationships with idealized physician-parent figures. But the same can be said of individuals with low back pain, tension headache, chronic undiagnosed pain of all types, or any other recurring complaint for which help is persistently sought but relief is never obtained.

By dealing in the unconscious, the unobservable and the untreatable, psychiatrists have perpetuated a frustrating myth that in the understanding and management of gastrointestinal disorders, they have something to say but little to offer.

New Treatment Approach To Psychosomatic Disorders

In the past, psychosomatic medicine has been the domain of psychiatrists and physiologists whose main interest has been in the etiologic links between particular personality types and specific diseases or between anxiety and physiologic end-states. While these observations have led to interesting speculations about individual response stereotypes to stress, they have not resulted in effective treatment strategies.

More recently a new approach to psychosomatic disorders has been developing from within the related disciplines of sociology and psychology. In 1961 the sociologist Mechanic noted that individuals varied considerably in their response to disease.[2] He noted "whether by reason of earlier experiences with illness, differential training in respect to symptoms or whatever, some persons will make light of symptoms, shrug them off, and avoid seeking medical care; others will respond to the slightest twinges of pain or discomfort by quickly seeking such medical care as is available." In order to describe this situation, Mechanic coined the term "illness behavior". Meanwhile, psychologists have been developing effective means of modifying individual's behaviors based upon learning theory. These ways of changing behavior have been applied not only to social and interpersonal behaviors but also to autonomic functioning by means of biofeedback training.

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Since 1972 the psychosomatic unit at Cincinnati General Hospital has adopted these new theoretical frameworks within sociology and learning theory and applied them in an attempt to explain and treat certain similarities observed in patients referred to the unit. In studying the common behaviors shared by these patients, it was recognized that they all displayed a mixture of passive (or dependent) and aggressive (or hostile) strategies which elicited and maintained an illness role. This repertoire has been termed "chronic illness behavior"[1]. These individuals shared the following common features:

1. All have pain or disability disproportionate to disease or tissue damage.
2. All have a life style arranged around the sick role.
3. There is a perpetual search for diagnosis or treatment that never succeeds.
4. Each patient displays a mixture of passive or dependent behavior that sustains the sick role and which is designed to place relatives or physicians in a caretaking position.
5. This behavioral style is maintained or reinforced in two major ways:
   a. It is reinforced by the investigative and caretaking responses of physicians and relatives.
   b. It serves as an avoidance mechanism by which the patient escapes from the anxiety of social, family or occupational roles for which he either lacks the skills or has experienced failure in the past.

Treatment Programs

Fundamental to this concept of **chronic illness behavior** is the belief that it is a learned pattern shaped by such consequences, (or contingencies) as attention from others or avoidance of anxiety. The belief that such behavior is both learned and currently maintained rather than due to unconscious and remote causes gives rise to a treatment program designed to modify illness behavior and its contemporary reinforcers. This treatment program has the following logical components:

1. The patient is told a cause or a cure for his disability is unlikely to be discovered. The focus is placed instead on facilitating new ways of coping with what the disability prevents the patient from doing.
2. One effect of the above is to switch the patient automatically from a somatic to a psychological framework without challenging the reality of the pain or disability. It is usual to find that the areas interfered with by disability are also those in which the patient lacks basic skills or has experienced failure. Techniques to teach new social skills and to extinguish anxiety are therefore major components of the program. The skill most often lacking is an ability to express needs appropriately or independently in an assertive manner (other than through demanding to be sick).
3. Another important effect of this approach is to place responsibility back with the patient and to cut short the endless search for new diagnoses or treatments. The patient is invited to design his own program in consultation with the staff and to set his own treatment goals in the areas of physical rehabilitation, social, family and occupational areas. This may often take several weeks of careful pre-admission planning. An important aspect of this approach is to build in rewards and incentives from the peer group using a therapeutic community approach. Other techniques designed to give back personal responsibility and reward independence on the ward are the patient daily evaluation group, the use of public progress charts and the self-monitoring of symptoms.
4. A major attempt is made to define the reward systems (positive contingencies) that have previously supported illness behavior. This involves fact finding by interviews with key family members and others in the patient's social environment. This also includes physicians and other health professions in "caretaking" roles.
5. Once supporting contingencies are identified, an attempt is made to extinguish them by means of family counseling and discussions with other key individuals. On the unit patients are discouraged from talking about symptoms and whenever practical are placed in control of their own medications (to avoid the social reinforcement that accompanies requests for pain relievers and tranquilizers).
6. In order to allow the patients to practice new social skills in their real environment they are encouraged to go home on weekends and to report progress back to the remainder of the patients and staff on their return.
7. In order to reinforce the learning on the

unit, patients are encouraged to attend outpatient groups that reflect the philosophy of the inpatient program.

8. Very little attention is paid to conventional diagnosis since it has no implication in terms of either treatment or prognosis. Instead, we define the patient's social and behavioral problems in relationship to the treatment programs available.

Illustrative Case History and Management Plan

The theoretical and treatment approaches can best be illustrated by a typical case history from a patient suffering from gastrointestinal complaints.

Mr. Brown is a 48-year-old, married, white man with an eight-year history of intermittent lower abdominal pain and diarrhea for which he has had six hospitalizations in the last five years including an exploratory laparotomy in 1970, followed by a repeat laparotomy in 1974 for presumed adhesions. He was referred to the psychosomatic unit by his internist after his surgeon had declined to operate again.

The patient was the eldest of nine children with an alcoholic father and a harassed mother who protected herself from her husband by frequent complaints of abdominal pain and cramps. As the eldest child, the patient was kept out of school frequently to help provide and care for the other children, but was constantly criticized by his father for his efforts and punished for his failures.

The patient has marked social and intellectual deficits in all areas of life. He has worked intermittently as a laborer and at the age of 30 he became a refuse collector for the city. He ceased work eight years ago after a fall following which his G-I complaints worsened. He now receives partial disability payment. The onset of symptoms coincided with his failure to qualify as a truck driver because he could not pass the written examination. He states he would like to become a school bus driver but doesn't think he can pass the tests.

The patient's sick role is supported by his wife who is an older woman working part-time as a nurse in a geriatric home. When the patient complains of pain, she encourages him to remain in bed and stays home from work to care for him. Their three children are becoming unruly and have recently begun to accuse their father of being "a fraud", thus increasing his need to "prove" he is sick, but also reinforcing his own view of himself as a poor father and a failure. For two years now he has been declining sexual intercourse because "my belly hurts".

Mr. Brown has almost no interests outside the home; his friends no longer bother to stop by (his wife says this is because they are tired of his complaints) and he states he cannot leave the house for fear he will be taken short away from the nearest bathroom. These fears are accompanied by palpitations and "dizzy feelings". His wife states that before his disability, her husband was a shy person who was reluctant to make friends and always fearful of being criticized.

The patient's view of himself as a sick person has been heavily reinforced by repeated hospitalizations and surgery although there is no demonstrable bowel disease or tissue pathology. He now takes analgesics and tranquilizers frequently and states that these ease his pain but also make him "feel better about myself".

In summary, Mr. Brown has an early predisposition to illness behavior as a result of the illness modeling by his mother. He grew up in a home where there was little emotional expression (hugging and kissing) and where he only obtained interest and sympathy from others when sick. As a result he has a poor repertoire of emotional expressions and has been differentially reinforced for obtaining attention through sick behavior. His earlier learning experiences also made him fearful to assume responsibility and the criticism and punishment he received from his father gave him a view of himself as helpless. This was reinforced by considerable social and educational deprivation as a result of remaining out of school to care for his siblings. Mr. Brown first became ill eight years ago at a time when he failed to get a job he wanted and following which he had a minor accident. His illness behavior became reinforced and entrenched as a result of disability compensation, caretaking responses from his wife and excessive medical and surgical attention. Recent admission to hospital was contributed to by the breakdown of relationships in his family (primarily with his son) and by the further loss of social reinforcement when he became house-bound.

Treatment Planning

Patients are asked to define their own treatment goals in four major areas, symptomatic, occupational, social and interpersonal, and family. In the case of Mr. Brown the following provisional treatment plan was arranged:

Symptoms:

1. All medication would be placed on p.r.n. schedules. He would be rewarded for decreasing intake of his own medication and would plot this on a chart on the door of his room.

2. After an appropriate evaluation of physical ability, a stepwise program would be developed for an increase in amount of time spent out of his room and in active pursuits. He would plot his activities and would again record them on a chart placed on the door of his room.

3. In order to help deal with his view of himself as helpless and worthless, he would be asked to note and record daily events which

represented accomplishments. He would present these to himself and to other patients and staff members at frequent intervals.

Occupational:

1. In his desire to become a school bus driver there is an element of wishing to care for others frequently found in patients with chronic illness behavior. Consultation with the Bureau of Vocational Rehabilitation would be used to assess realistic intellectual or learning deficits and to devise remediation plans so that he might complete the driving test.

2. Staff would explore his willingness to give up compensation if a viable alternative occupation could be worked out.

Social and Interpersonal:

1. The patient's social skills would be carefully assessed with regard to his capacity to obtain attention in other ways than through being sick, to deal with interpersonal anxiety and stress more effectively than by physical complaints and to solve problems constructively without withdrawing from difficulties into an illness role. As identified these social skills deficits would be dealt with by social skills training in a group situation.

2. The patient's tendency to obtain attention through physical complaints would be discouraged by an agreement not to talk about them other than at carefully specified times. He would be heavily reinforced socially for obtaining attention through accomplishment rather than through complaints.

Family:

1. Counseling and family therapy would be conducted to extinguish the wife's own responses to the illness and to encourage alternative methods of communication with him. Therapy would also facilitate better relationships with the children and methods by which the patient could obtain their attention without having to be sick.

2. Sexual counseling would be focused on the causes and cures of recent impotence with couples therapy for himself and his wife based on behavioral lines such as those developed by Masters and Johnson.

All these aspects of the treatment program would be monitored and reinforced by two strategies on the unit. First is a daily evaluation group at which all patients meet together with a staff person to go over their daily programs. All goals are individually discussed and evaluated by the group, giving an opportunity for considerable social reinforcement. Once a week this group also meets with the total staff to present progress towards defined goals. Secondly, the patient would go home every weekend so that the capacity to sustain behaviors learned on the unit could be tested in the home environment. The patient would report progress to a family group which meets weekly following the weekend.

Conclusion

It is our view that certain selected individuals with G-I disorders learn to deal with their anxieties and fulfill their life needs by remaining sick despite conventional therapy. They can be helped considerably in the kind of treatment program described. We believe that the kinds of patients referred to our unit are those commonly referred by gastroenterologists to psychiatrists for help and that such individuals belong in a category best defined as "chronic illness behavior". We note that this approach carries with it no implications for the psychogenic etiology of G-I disorders in general, or for the role of psychiatrists in understanding or treating them. That remains the province of the gastroenterologist.

Acknowledgments

The treatment approach described in this paper was developed and implemented by the staff of the Psychosomatic Unit, Cincinnati General Hospital.

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Management of Massive Upper Gastrointestinal Bleeding

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Massive upper gastrointestinal (UGI) bleeding is unfortunately a common problem in medical practice and is associated with an appreciable mortality, 5-50%.[1,2] Mortality rates increase in patients over the age of 50 and in those patients with associated cardiopulmonary, renal or liver disease. Other factors contributing to mortality is the occasional difficulty in diagnosing the presence of UGI bleeding or a lack of appreciation of the severity of the bleeding.

If mortality is to be kept to a minimum, such patients must be approached aggressively from both the diagnostic and therapeutic point of view for only with accurate diagnosis can rational therapy be given. Each patient with UGI bleeding should be evaluated and cared for by the joint efforts of the primary care physician, the gastroenterologist and the surgeon.

It must be emphasized that the patient with UGI bleeding presents a difficult problem. The plan of diagnosis and management presented here is just one method of approaching such patients and is by no means intended as the only acceptable approach. It is essential that specific diagnostic and therapeutic maneuvers be individualized to the patient, the specific situation at hand, the facilities available and the experience of the individual physicians involved.

Immediate Management

When the patient is first seen and the possibility of UGI bleeding is considered, the severity of the blood loss must be immediately assessed.[1-5] The criteria for massive UGI hemorrhage are listed in Table I. If bleeding has been massive, immediate resuscitative measures are instituted. These include: 1) insertion of a large bore intravenous line and administration of isotonic fluids until blood is available, 2) installation of a separate central venous pressure line (CVP) to monitor adequacy of volume replacement and to avoid fluid overload, 3) withdrawal of blood for type and cross match, complete blood count including a platelet count, prothrombin time, liver function tests, creatinine, electrolytes and sugar, 4) administration of oxygen, 5) insertion of a **large** bore orogastric tube (Ewald tube) and the institution of ice water lavage and 6) an electrocardiogram.

While these maneuvers are performed, a history can be taken and a quick, but thorough, physical examination done. Especially relevant points in the history and physical examination are listed in Tables 2 and 3.

With this approach, the diagnosis of UGI bleeding can be made, the severity of the blood loss assessed, initial therapy for the effects of blood loss begun, assessment of the cardiac, liver, renal and pulmonary status done, and initial therapy to control blood loss begun.

A GI bleeding flow sheet should be mandatory in the management of UGI bleeding for only by constant monitoring and attention to detail can early deterioration and complications be avoided. This flow sheet should include hourly entries of mental status, blood pressure and pulse (supine and sitting), central venous pressure, urine output, results of gastric lavage, stool appearance, laboratory results, diagnostic tests and fluid, blood and drug administration. An example of such a flow sheet is shown in Reference 1.

Regarding blood transfusions, it should be emphasized that a unit of fresh blood should be given after each 4-6 units of bank blood to avoid depletion of coagulation factors. Furthermore, overtransfusion must be avoided since overtransfusion can aggravate bleeding or cause its resumption. The CVP should be kept at 8-10 cm and the hematocrit at 30-35.

The use of ice water lavage bears emphasis. This treatment is frequently effective in the

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Table 1

CRITERIA OF MASSIVE UGI HEMORRHAGE

HYPOTENSION
BP less than 90-100 mmHg systolic
POSTURAL HYPOTENSION (supine to sitting)
drop in systolic BP more than 10 mmHg
rise in pulse rate more than 20/minute
OTHER PHYSICAL FINDINGS
pallor, cold, clammy extremities, shivering, restlessness, excessive thirst
URINE OUTPUT
less than 25-30 ml/hour
BRIGHT RED BLOOD
when it derives from the UGI tract
CONTINUED HEMATEMESIS
FALL IN HEMATOCRIT (least sensitive)

control of active hemorrhage and often slows the rate of bleeding so that endoscopy and/or UGI series can be performed. A large-bore tube, Ewald tube, must be used to effectively lavage the upper GI tract and to remove blood clots. Ice-saline should **not** be used because of the possible dangers of sodium overload, especially important in those patients with cardiovascular or liver disease.[4-6] Once active bleeding has been controlled, a nasogastric tube should be left in place so that the status of bleeding can be monitored hourly.

Diagnostic Approach To The Source Of UGI Bleeding

As already stated, rational therapy and avoidance of complications requires an accurate diagnosis of the site of bleeding. This necessitates distinguishing **actual** bleeding lesions from **potential** bleeding lesions. Thus, as soon as immediate resuscitative measures are underway and shock or any cardiovascular instability has been controlled, aggressive search for the bleeding lesion can be begun even while the patient is bleeding and radiologic and/or endoscopic examination can be performed. Diagnostic evaluation should proceed simultaneously with therapy. Speed is of the essence, for the success rate of establishing the site and cause of bleeding diminishes with the time from the acute bleeding.[7]

It must be remembered that a source of bleeding other than the one that is apparent from the history or UGI series may be found in as many as 40% of patients.[3,4,7-11]

In addition to the history and physical examination, the various diagnostic modalities available include: 1) nasogastric intubation, 2) barium x-ray of the UGI tract (UGI series), 3) UGI pan-endoscopy (esophagus, stomach, duodenum) and 4) selective visceral arteriography.

If it is not clear that the source of bleeding is from the UGI tract, a nasogastric tube should be inserted to search for bright red blood or "coffee-grounds." Finding blood in the NG aspirate indicates bleeding proximal to the fourth portion of the duodenum. The lack of blood does **not** indicate that the source is not the UGI tract but only that the blood is passing down the gut.

UGI Series: This is one of the first methods to be applied to the diagnosis of UGI bleeding and it remains today a valuable procedure capable of providing important information.[11] In the patient with massive hemorrhage, the UGI series must be performed by an experienced radiologist whose primary responsibility is the details of the study. He should not, and cannot be concerned with monitoring the patient, insuring that proper therapy is being administered, etc. These concerns must be the responsibility of the physician responsible for the patient.

The limitations of the information derived from an UGI series should be appreciated if the maximum usefulness of this study is to be utilized. It must be remembered that an UGI series can only present evidence of a **potential** bleeding lesion and cannot diagnose the **actual** bleeding lesion with any degree of certainty. The demonstration of a duodenal ulcer, a gastric ulcer or of esophageal varices does not necessarily indicate that these lesions are the source of bleeding.[4,7-11] This fact is strikingly brought to mind by the occasional patient in whom two or more of these lesions are demonstrated in a UGI series and the source of hemorrhage remains uncertain. It must also be remembered that various lesions cannot be visualized on a UGI series, i.e., esophagitis, ero-

Table 2

HISTORY IN UGI BLEEDING

Medications—salicyclates, steroids, phenylbutazone, reserpine, anticoagulants
Alcohol history
Previous GI bleeding or transfusions
Other non-gastrointestinal bleeding
History of ulcers, jaundice or liver disease
History of diabetes, cardiopulmonary or renal disease
Previous gastrointestinal surgery
Family history of GI bleeding

sive gastritis, or a Mallory-Weiss tear. These lesions require endoscopy.[4,7-11] Defects visualized in the UGI series must be cautiously interpreted for they may be blood clots.

If no lesion is demonstrated by UGI series, the source of bleeding may be gastritis, esophagitis or a Mallory-Weiss tear. In addition, in this situation, a duodenal ulcer or a gastric ulcer may have been missed since this procedure does have a sizable number of false negative results.[11]

Endoscopy: Because of the limitations of the UGI series in bleeding patients, this study should be supplemented with UGI pan-endoscopy. In experienced hands and with modern equipment, endoscopic examination of the esophagus, stomach and duodenum can be performed as a single examination during the hemorrhage.[4-11] As currently performed. emergency pan-endoscopy is a safe and reliable means of localizing the site of bleeding and defining the bleeding lesion and is probably the most reliable diagnostic modality currently available.[1,4,10-11] In fact, in many centers, endoscopy is the first procedure employed in the diagnosis of UGI bleeding and is then followed by barium studies.

It is clear that with the application of UGI series only, many diagnoses are missed, many patients remain undiagnosed, and many patients are erroneously believed to be bleeding from duodenal ulcer or from esophageal varices.[4,7-11] Clearly, if possible, UGI pan-endoscopy should be performed in most patients with UGI bleeding.

Selective angiography: The newest of the diagnostic procedures for GI bleeding is selective angiography. This procedure requires physicians expert in its use and the availability of specialized equipment. To be useful, this procedure must be done while the patient is bleeding and at a minimum rate of 0.5-1.0 ml/min (30-60 ml per hour). When the patient is bleeding this actively, endoscopy and UGI series may be difficult, if not impossible, to perform and aspiration of blood a real danger.[12-16] The best results are obtained when **selective** cannulation of various vessels is performed, i.e. celiac, superior mesenteric artery and left gastric artery, with equipment that will permit image magnification. If a UGI series has been performed previously, 24-48 hours must elapse before angiography can be performed since the remaining barium will obscure the intraarterial contrast medium. This procedure may be both diagnostic and therapeutic in that if a lesion is seen, selective arterial infusion of vasopressin may control bleeding.

Table 3

PHYSICAL EXAM IN UPPER GI BLEEDING

LIVER DISEASE AND PORTAL HYPERTENSION
- —jaundice, spider angiomata, ascites, hepatomegaly, collateral veins (peri-umbilical)

HEMATOLOGIC DISORDERS (generalized bleeding)
- —petechiae, ecchymoses, nose bleed, hematuria, splenomegaly, lymphadenopathy

VASCULAR ABNORMALITIES
- —hereditary hemorrhagic telengiectasia
  peri-oral telegiectasia
  bruits in chest
- —pseudoxanthoma elasticum
  angioid streaks or retina
  coarse, yellow axillary skin folds
- —phlebectasia or jejunum
  varicosities under tongue
- —Ehler's-Danlos syndrome
  hyperextension of joints

Therapy

Fortunately, most patients with UGI bleeding will cease bleeding with the measures outlined above. When bleeding has stopped for 24-48 hours, a vigorous regimen of hourly antacids should be instituted with gradual liberalization of the diet. In the remaining patients who do not cease bleeding or resume bleeding, the decision as to optimal therapy is difficult and the decision for additional medical therapy or of surgical intervention, the timing and type of surgery, is best a joint decision of the internist and the surgeon.

A promising mode of therapy for UGI bleeding is the selective intraarterial infusion of pitressin.[13-16] This form of therapy may be effective in peptic ulcer, gastritis, Mallory-Weiss tear or esophageal varices. The exact role, optimal dose and route of administration, and the lesions most likely to respond to this form of therapy remain to be determined. Additional forms of therapy have been proposed but are poorly evaluated and unproved. These include selective embolization of the involved vessel (with autologous clot, hypertonic glucose or gelfoam), direct installation of pressor agents on the lesion, and electrocoagulation of the lesion via endoscopy, etc. These modalities are currently experimen-

tal, remain to be adequately evaluated and **cannot** be considered routine therapy.

The patient with bleeding esophageal varices, usually with jaundice, ascites, or encephalopathy, poses a special problem.[1-3,15,17] The surgical mortality in such cases approaches 100% and thus every effort must be made to control hemorrhage by non-operative means. In this desperate situation, balloon-tamponade of the varices is helpful.[18-19] A modified Sengstaken-Blakemore tube should be used to avoid aspiration.[18] If excessive morbidity and mortality is to be avoided,[19] only those expert in its use should attempt this form of therapy. Furthermore, constant nursing supervision by a nurse familiar with the use and complications of the S-B tube, must be continually available. The details of its proper use have been nicely described by Pitcher.[18] It should be appreciated that use of the S-B tube is **not** a diagnostic maneuver, but a therapeutic maneuver. Cessation of bleeding after use of balloon-tamponade does not necessarily indicate the presence of bleeding esophageal varices since several bleeding lesions may stop bleeding.

Bleeding erosive gastritis, which cannot be controlled by the usual medical means, is a serious problem.[3,10,16] In this situation, intraarterial vasopressin therapy should be tried but, should this fail, surgical therapy may be required. Unfortunately, optimal surgical therapy has not been defined and a total or near total gastrectomy may be required to control bleeding.

A more detailed discussion of the indications, usefulness and types of surgical therapy is beyond the scope of this discussion and the reader is referred to several excellent discussion.[1-3,10,17] With the qualifications made above, some general **rough** rules of thumb suggesting the early consideration of surgery include: 1) the elderly patient who cannot tolerate prolonged bleeding, 2) the patient in whom blood pressure cannot be maintained or stabilized, 3) the patient with a recurrence of significant bleeding while in the hospital, 4) the patient who continues to bleed, i.e. blood transfusion requirements of greater than 2 units per hour after initial stabilization or a total requirement of 8-10 units of blood and 5) the patient with a past history of significant UGI bleeding.

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EDITORIAL

Who Shall Live?

AT a recent meeting of the Falls Region Health Council, the subject of active discussion was "body scanners". The present cost of each such unit was estimated at over $500,000, and each diagnostic test may cost the patient over $200. The various members of the Council, all interested in proper use of the resources available, debated the topic at some length, and then (I was the only physician present at the time) turned to me and asked: "How important are body scanners, anyway?", and "How many of them do we need in our seven-county area?".

Such hard questions are arising more and more often, everywhere, as physicians and patients alike face the realizations that resources (i.e., funds) are not infinite, and that the politically-inspired dream of "perfect health for all" is both physically and fiscally unobtainable. We now allocate, as a nation, over $100 billion per year to the pursuit of health—8% of our GNP. $200 billion might make us somewhat healthier, but at what cost to other important national and personal goals, such as justice, freedom, art, housing, etc.? To illustrate once again the possibilities: suppose a cure for cancer were discovered tomorrow, but it cost $250,000 per cure? Or, even more close at hand, suppose coronary bypass surgery (which cost over $400 million in 1973) were applied to the extent recently recommended by one of its proponents. Such surgery alone would then exceed $100 billion per year—leaving, I believe we all would agree, the medical therapeutic picture markedly out of balance!

Doctor Howard Hiatt, in the July 31, 1975, issue of the *New England Journal of Medicine*, addressed himself to this issue of resource allocation in a provocative article entitled "Protecting the Medical Commons: Who is Responsible?". I commend to you the entire article, but offer here this quote: "I believe it is as inappropriate to indict physicians for depletion of resources on the commons as it is to expect physicians alone to determine priorities. The challenge for the medical profession is how to join with others in effective decision making."

Along the same line, Victor Fuchs, Professor of Economics at Stanford University, and Professor of Community Medicine at Stanford Medical School, has authored a short but penetrating book entitled "Who Shall Live" (Basic Books, 1974), in which he examines our American "health care" system both as an economist and a humanist. You should read this book—I believe you will agree with many (but not all!) of his clearly expressed ideas. Sample quotes: "A great deal of what has been written recently about the 'right to health' is very misleading. It suggests that society has a supply of 'health' stored away which it can give to individuals. . . . Positive health can only be achieved through intelligent effort on the part of each individual. . . . The notion that we can spend our way to health is a vast oversimplification." And, "Although physicians account for only 8% of health service employment, their actions and decisions are of critical importance to the entire system. The term 'health team' is sometimes only a figure of speech, but the 'captaincy' by the physician is beyond doubt."

Both Hiatt and Fuchs, in their concern for quality and costs, bring into focus a basic dilemma of the practicing physician—that is, we have been trained to offer our patients the very best care we can, and our spirits rebel at being asked to determine for them a lesser level of care, based

on financial limitations. Perhaps, if society, with the help of physicians in advisory roles, makes such determinations as necessary for its overall well-being, we as practitioners can ethically work within such guides. I believe we shall have to.

As this new year progresses, we in Kentucky will witness the development of two Health Systems Agencies (East and West), which represent the vehicles by which the priorities mentioned above will be developed. These HSAs, replacing Hill-Burton, Comprehensive Health Planning and Regional Medical Programs, will be heavily funded, will be governed by a council of "consumers" and "providers", and will have a broad Federal planning mandate covering not only facilities, but also "programs" and "services". As the regulations are drawn, opportunities for input by practicing physicians are regrettably limited. It appears important, though, that we participate and advise to the limits allowed, for, to coin a phrase, medical care is too important to be left in the hands of the consumers. WIH

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hat's why special medication is preferred

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A special favorite* of Kentucky physicians in controlling childhood vomiting



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rectal antinauseant/antiemetic

pyrilamine maleate 25 mg; sodium pentobarbital 30 mg
Warning: may be habit forming

*Based on usage by dosage form; data gathered by independent research organization.

RIPTION: WANS* Children: (Blue) pyrilamine maleate g and pentobarbital sodium* ½ gr (30 mg) scored for sage. WANS* No. 1: (Pink) pyrilamine maleate 50 mg entobarbital sodium* ¼ gr (50 mg) scored for ½ dosage. NS* No. 2: (Yellow) pyrilamine maleate 50 mg and barbital sodium* 1½ gr (100 mg) scored for ½ dosage.

RNING: may be habit forming.

TRAINDICATIONS: Infants under 6 months. Acute mittent porphyria, known hypersensitivity to barbiturates tihistamines, known previous barbiturate addiction, e hepatic impairment, CNS injury, senility, and presence controlled pain.

RNINGS: Barbiturates may be habit forming. Pre-existing ological disturbances may be aggravated. Idiosyncratic ions may occur. Acquired sensitivity may result in allergic ions. Safety in pregnancy has not been established.

AUTIONS: Use cautiously with other sedative, hypnotic rcotic agents. Use with caution in patients with acute or ic hepatic disease, fever, hyperthyroidism, diabetes us, severe anemia, congestive heart failure, or a history g dependence or suicidal tendencies. May impair ess and coordination with increased accident risk.

ADVERSE REACTIONS: Drowsiness, fatigue, vertigo, incoordination, tremor, muscle weakness, ataxia, hypotension, respiratory depression, delirium and coma. Dryness of nose, mouth, and throat, pupillary dilatation or blurred vision, urinary retention, abdominal pain, nausea, vomiting, diarrhea, and hypersensitivity reactions. Overdose may result in hallucinations, excitement, ataxia, incoordination, athetosis, convulsions, and death.

DOSAGE AND ADMINISTRATION: Rectally, children 2-12 years of age, one WANS* CHILDREN every 6-8 hours as required. Children under 2 years of age may receive ½ the above dosage. *Adults:* Rectally, one WANS* No. 1 Supprette™ to inhibit mild nausea and/or vomiting; one WANS* No. 2 Supprette to control pernicious vomiting. Repeat doses for adults should be 4 to 6 hours apart, not to exceed four doses in 24 hours. Moisten finger and Supprette with water before inserting. Optimum dosage must be determined in each case by the clinical response.

WEBCON

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Fort Worth, Texas 76101

ORGANIZATION SECTION

KMA Business Committee Lists Programs For Members

The primary purpose of the KMA Business Management and Services Committee is to investigate programs that will provide tangible benefits for KMA members. This Committee has endorsed programs only after a considerable amount of study, investigation and discussion. We are listing, for the benefit of KMA members, programs that have been endorsed by the Business Management and Services Committee and are now in effect for KMA members.

Health

Prepaid health care protection through Blue Cross-Blue Shield. Two separate options are available for KMA members and their employees: Blue Cross—Comprehensive, Blue Shield—Schedule D with Major Medical; Blue Cross—Comprehensive, Blue Shield—Usual, Customary and Reasonable with Major Medical.

Travel Accident

Fifty thousand dollars accidental death and dismemberment travel accident insurance for KMA Officers, AMA Delegates and Alternate Delegates, KMA Delegates or their Alternates, KMA Committee Members and KMA staff under age 70, while traveling on Association business. The policy is written with the Lumbermen's Mutual Casualty Company.

Disability Income Program

A disability plan providing up to $500 per week on accident or sickness benefits. This low-cost policy is written with the Phoenix Assurance Company of New York through the A. P. Lee Agency.

Leasing

A comprehensive and flexible auto leasing plan for KMA members. General Leasing Corporation administers this program, which includes leasing of cars; medical, surgical and laboratory equipment; and office furnishings.

GI Radiology Symposium Set

A Symposium on Gastrointestinal Radiology, sponsored by the Department of Diagnostic Radiology at the University of Kentucky Medical Center, is set for April 28-30. Designed for the practicing radiologist, gastroenterologist and gastrointestinal surgeon, the program will consist of brief lectures, panel discussions and case presentations. There is a $300 fee. For more information, contact Frank Lemon, M.D., Office of Continuing Education, College of Medicine, University of Kentucky, Lexington 40506.

CORRECTION

Our apologies are extended to Walker M. Turner, M.D., Paducah, who was erroneously listed on the "Deceased Physicians" page in *The KMA Journal*, December issue. The culprit was an erroneous report received in the KMA Headquarters Office from the U.S. Post Office.

(Please Clip and Return)

Should you want the Business Management and Services Committee to investigate a particular program that you feel would be of tangible benefit to KMA members, please list below and forward it to:

Harold D. Haller, M.D., Chairman
Business Management and Services Committee
Kentucky Medical Association
3532 Ephraim McDowell Drive
Louisville, Kentucky 40205

_____

_____

_____
Name and Town



Big Balanced Rock, Chiricahua Mountains, Arizona (approx. 1,000 tons)

nd useful in the management of vertigo* associated with
es affecting the vestibular system.
. relieve nausea and vomiting often associated with vertigo.*
al adult dosage for Antivert/25 for vertigo:* one tablet t.i.d.
) available as Antivert (meclizine HCl) 12.5 mg. scored
s, for dosage convenience and flexibility.
ivert/25 (meclizine HCl) 25 mg. *Chewable* Tablets for
a, vomiting and dizziness associated with motion sickness.

UMMARY OF PRESCRIBING INFORMATION

ICATIONS. Based on a review of this drug by the National Academy of
ces—National Research Council and/or other information, FDA has classified
dications as follows:
ctive: Management of nausea and vomiting and dizziness associated with
n sickness.
sibly Effective: Management of vertigo associated with diseases affecting the
ular system.
al classification of the less than effective indications requires further
igation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

Antivert®/25
(meclizine HCl) 25 mg. Tablets
for vertigo*



Documented bioavailability...
Regimen flexibility

q.i.d. or q 6h immediately after or between meals

E-Mycin®

erythromycin enteric-coated tablets, Upjohn

250 mg

Formulated for quality...
Priced for economy.

Upjohn

See facing page for brief summary of prescribing information.

J-4889-9

'CIN® TABLETS — 250 mg — For Oral Administration (ery-
rnycin enteric-coated tablets, Upjohn)
Ncin Tablets (erythromycin enteric-coated tablets) are spe-
a' coated to protect the contents from the inactivating effects
astric acidity and to permit efficient absorption when ad-
istered either immediately after meals or when given be-
en meals on an empty stomach.

dations: *Streptococcus pyogenes (group A beta-hemolytic*
tococci): Upper and lower respiratory-tract, skin, and soft-
se infections of mild to moderate severity. Parenteral benza-
ir penicillin G is considered by the American Heart Associa-
to be the drug of choice in the treatment and prevention
reptococcal pharyngitis and in long-term prophylaxis of
matic fever. When oral medication is necessary (because
parenteral route is contraindicated) or if there is known
gy to penicillin, the following recommendations made by
merican Heart Association apply: 1) Oral penicillin G or V
re no allergy exists)—This is the drug of choice. Give for
nimum of 10 days; 2) Erythromycin—Give for a minimum
days. A few strains of streptococci resistant to erythro-
n have been reported.
-hemolytic streptococci (virdans group): Short-term pro-
xis against bacterial endocarditis prior to dental or other
tive procedures in patients with a history of rheumatic
or congenital heart disease who are hypersensitive to
illin. (Erythromycin is not suitable prior to genitourinary
ry where the organisms likely to lead to bacteremia are
-negative bacilli or the enterococcus group of streptococci.)
ylococcus aureus: Acute infections of skin and soft tissue
ld to moderate severity. Resistance may develop during
nent.
coccus pneumoniae: Upper respiratory-tract infections
otitis media, pharyngitis) and lower respiratory-tract in-
ns (e.g., pneumonia) of mild to moderate degree.
olasma pneumoniae (Eaton agent, PPLO): In the treatment
mary atypical pneumonia, when due to this organism.
nema pallidum: Infections due to this organism.
Corynebacterium diphtheriae and *Corynebacterium minutissimum:* As an adjunct to antitoxin, to prevent establishment of carriers, and to eradicate the organism in carriers. In the treatment of erythrasma.
Entamoeba histolytica: In the treatment of intestinal amebiasis only. Extra-enteric amebiasis requires treatment with other agents.
Listeria monocytogenes: Infections due to this organism.

Contraindication: Contraindicated in patients with known hypersensitivity to erythromycin.

Warning: Safety for use in pregnancy has not been established.

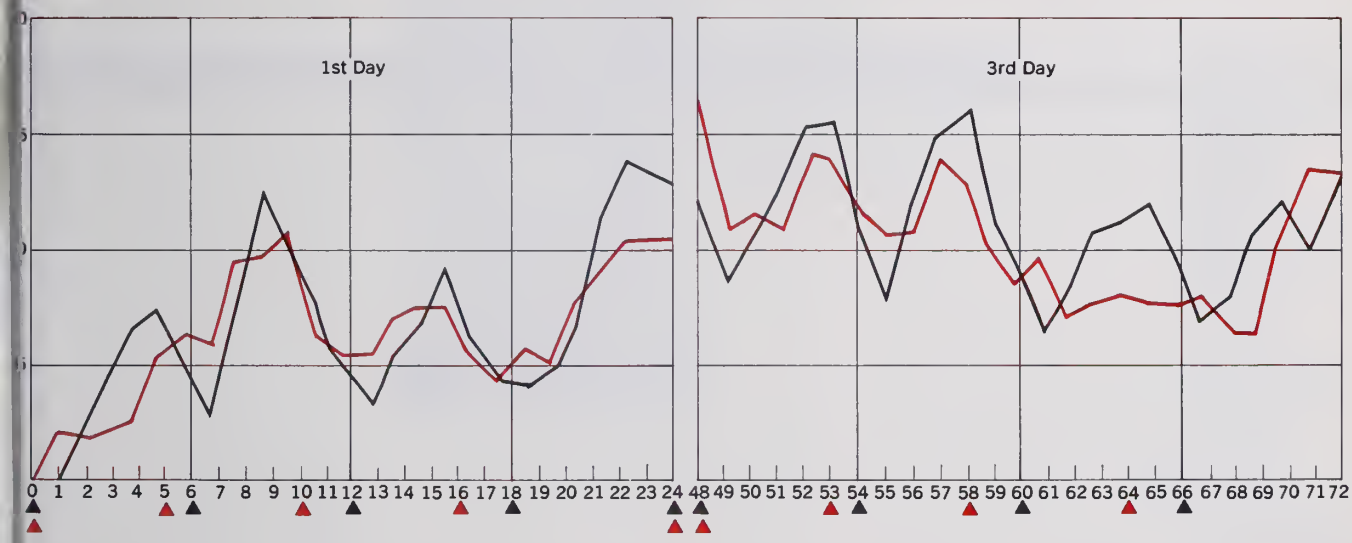
Precautions: Erythromycin is principally excreted by the liver. Caution should be exercised in administering the antibiotic to patients with impaired hepatic function. Surgical procedures should be performed when indicated.

Adverse reactions: The most frequent side effects of erythromycin preparations are gastrointestinal, such as abdominal cramping and discomfort, and are dose-related. Nausea, vomiting, and diarrhea occur infrequently with usual oral doses. During prolonged or repeated therapy, there is a possibility of overgrowth of non-susceptible bacteria or fungi. If such infections occur, the drug should be discontinued and appropriate therapy instituted. Mild allergic reactions such as urticaria and other skin rashes have occurred. Serious allergic reactions, including anaphylaxis, have been reported.

Treatment of overdosage: The drug is virtually nontoxic, though some individuals may exhibit gastric intolerance to even therapeutic amounts. Allergic reactions associated with acute overdosage should be handled in the usual manner—that is, by the administration of adrenalin, corticosteroids, and antihistamines as indicated and the prompt elimination of unabsorbed drug, in addition to all needed supportive measures.

How supplied: 250 mg—in bottles of 100 and in unit-dose packages of 100 enteric-coated tablets. Caution: Federal law prohibits dispensing without prescription.
For additional product information, consult the package insert or see your Upjohn Representative.

nonstrated bioequivalence of E-Mycin taken immediately after meals or between meals.



Regimen A (after meals)—One 250 mg E-Mycin® tablet administered q.i.d. immediately after breakfast, lunch, and dinner, and at bedtime with a snack.

Regimen B (between meals)—One 250 mg E-Mycin tablet administered q 6h at least two hours after meals.

E-Mycin Study CS076 on file at The Upjohn Company. The study was performed with twenty-two normal male adult volunteers utilizing a randomized two-way complete crossover design.

tatistically significant difference in area under
curve was observed from 0-24 hours or 48-72
s at the 95% confidence level ($p>.05$).

data clearly demonstrate that E-Mycin, when
nistered q.i.d. immediately after meals, pro-
d average serum levels equivalent to those
ned when the drug was administered q 6h at
two hours after meals.

E-Mycin®

erythromycin enteric-coated tablets, Upjohn
250 mg
Formulated for quality... priced for economy

Upjohn The Upjohn Company, Kalamazoo, Michigan 49001, U.S.A.
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M10875

Opinion & Dialogue

Should a specially prepared package insert be made available to patients?



Dr. Alexander M. Schmidt
Commissioner,
Food and Drug
Administration



Dr. James H. Sammons
Executive Vice President
of the American
Medical Association

The idea of a so-called pati package insert has been around a long time. Many physicians alr use written instruction sheets to provide patients with informatio about the drugs they are taking. some physicians give verbal inst tions; but in too many instances these are what I call eye-glazing ercises. I have seen patients sit v glazed eyes listening to a rapid-f lecture by a hurried physician wi has 20 people out in his waiting room. These patients aren't give sufficient understanding and the fore do not follow instructions. S think the idea of an official pack insert for patients is a good one. Perhaps we should really think o this kind of information simply a extension of drug labeling.

The benefits of patient involveme

Many physicians may not r ize how frequently a patient obta his drug information from Aunt Tillie or the next door neighbor. this information is almost alwa bad or irrelevant to the case at h Furthermore, the incentive to go along with a prescribed program slim if the only reading matter th patient receives, along with his p scription, is a bill.

As an educator I am impre by the principle that the best wa get someone to do something is involve him in the process. So th

I think there are advantage well as some real disadvantages a patient package insert. When y begin to use semi-medical or me cal terms to describe complicati or possible sequelae of disease c treatment, you may frighten the tient—particularly since the mo highly sophisticated patient is n the one who is going to read the sert. The patient who will read it the one most susceptible to frigl and confusion by the language.

On the positive side, a pacl insert will probably give the pati better insight into why he is beir treated the way he is, and it may give the physician a little bit mo time. But it does not remove fro the physician the need or obliga to explain the insert.

Some pitfalls in the inclusion of side effects

Certainly a patient should l warned of the possibility of seric side reactions—to know what th real dangers are. But it doesn't c bit of good to indicate that a pat on oral penicillin may develop a rash, itching, or a drop in blood pressure. Or that he may faint. I think the real danger is that frigl engendered by the insert may p sibly outweigh the potential goo

n purpose of drug information
the patient is to get his coopera-
in following a drug regimen.

**paration and distribution of
ent drug information**

We would hope to amass infor-
ion from physicians, medical
eties, the pharmaceutical indus-
nd centers of medical learning.
ultimate responsibility for uni-
n labeling must, however, rest
the Food and Drug Administra-
. There is nothing wrong with
agency saying, "this informa-
is generally agreed upon and
efore it should be used," as long
ur process for getting the infor-
ion is sound.

Distribution of the information
problem. In great measure it
ld depend on the medication in
stion. For example, in the case
n injectable long-acting proges-
ne, we would think it mandatory
sue two separate leaflets—a
t one for the patient to read be-
getting the first shot and a long
to take home in order to make a
sion about continuing therapy.
is case, the information might
ut directly on the package and
removable at all. But for a medi-
on like an antihistamine this
rmation might be issued sepa-
ly, thus giving the physician the
on of distribution. This could
erve the placebo use, etc.

It is in the distribution of patient information that the pharmacist may get involved. As professionals and members of the health-care team and as a most important source of drug information to patients, pharmacists should be responsible for keeping medical and drug records on patients. It is also logical that they should distribute drug information to them.

Realistic problems must be considered

We have to expect that the introduction of an information device will also create new problems. First, how can we communicate complex and sophisticated information to people of widely divergent socioeconomic and ethnic groups? Second, what will we say? And third, how can we counteract the negative attitude of many physicians toward any outside influence or input? Hopefully the medical profession will respond by anticipating the problems and helping to solve them. Assuming we can also solve the difficulty of communicating information to diverse groups throughout the United States, our remaining task will be the inclusion of appropriate material.

What information is appropriate?

In my opinion, technical, chemical and such types of material should not be included. And there is no point in the routine listing of side effects like nausea and vomiting which seem to apply to practically all drugs, unless it is common with the drug. However, serious side effects should be listed, as should information about a medication that is potentially risky for other reasons.

Other pertinent information might consist of drug interactions, the need for laboratory follow-up, and special storage requirements. What we want to include is information that will help increase patient compliance with the therapy.

Positive aspects of patient drug information

Labeling medication for the patient would accomplish a number of good things: the patient could be on the lookout for possible serious side effects; his compliance would increase through greater understanding; the physician would be a better source of information since he would be freer to use his time more effectively; other members of the health-care team would benefit through patient understanding and cooperation; and, finally, the physician-patient relationship would probably be enhanced by the greater understanding on the part of the patient of what the physician is doing for him.

---

r the doctor can remove that fear
0 or 30 minutes of conversation.

I'm not suggesting that we
hold any information from the
ent because, first of all, it would
otally dishonest and secondly, it
ld defeat the very purpose of the
rt. I do think that a patient on the
n control pill should know about
ncidence of phlebothrombosis.

If you're going to tell a patient
ncidence of serious adverse re-
ons, then you have to tell him
a concerned medical decision
made to use a particular medi-
on in his situation after careful
sideration of the incidence of
plications or side effects.

**tionally unstable patients pose
ecial problem**

There are patients who, be-
se of severe emotional problems,
d not handle the information
ained in a patient package in-
Yet if we are going to have a
kage insert at all, we just can't
e two inserts. I think we might
ly have to tell the families of
e patients to remove the insert
the package.

**al implications of the patient
kage insert**

Just what effect would a patient package insert have on malpractice? We could try to avoid any legal implications by pointing out that the physician has selected a particular medication because, in his professional judgment, it is the treatment of choice. For instance, you can't tell everyone taking antihistamines not to work just because a few patients develop extreme drowsiness which can lead to accidents. And what about the very small incidence of aplastic anemia rarely associated with chloramphenicol? If, based on sensitivity studies and other criteria, we decide to employ this particular antibiotic, we do so in full knowledge of this serious potential side effect. It's not a simple problem.

How do we handle an insert for medication used for a placebo effect?

With rare exceptions, physicians no longer use medications for a placebo effect. This question does raise the issue of how a patient may react to receiving a medication without a package insert.

Preparation of the package insert

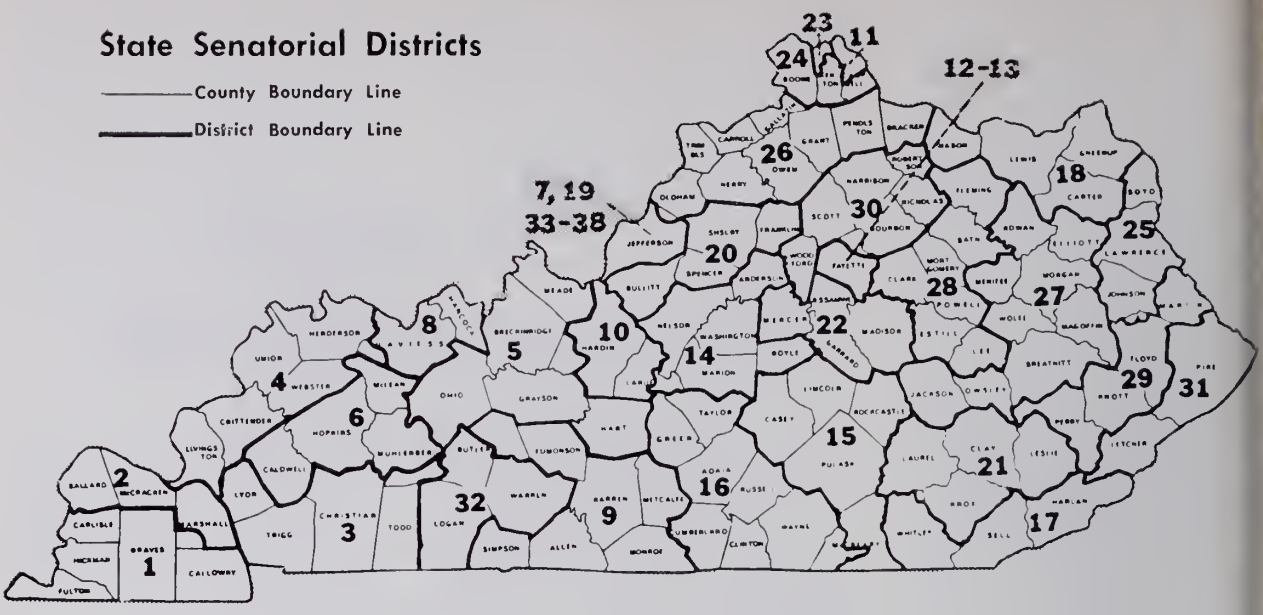
The development of the insert ought to be a joint operation between physicians, the pharmaceutical industry, the A.M.A. and the F.D.A.

I view the A.M.A.'s role as a coordinator or catalyst. It is the only organization through which the profession as a whole, irrespective of specialty, can speak. It has relatively instant access to all the medical expertise in this country. And it can bring that professional expertise together to ensure a better package insert. The A.M.A. can work in conjunction with the industry that has produced the product and which is ultimately going to supply the insert.

I don't think we should rely, or expect to rely, on legislative committees and their nonprofessional staffs to make these decisions when it is perfectly within the power of the two groups to resolve the issues in the very best American tradition—without the government forcing us to do it. I think the F.D.A. has to be involved, but I'd like them to become involved because they were asked to become involved.

Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D.C. 20005

P·M·A



Ky. Senate and House Rosters Listed for 1976 Assembly

A complete list of Senators and Representatives who will participate in the 1976 Kentucky General Assembly is printed below for your information.

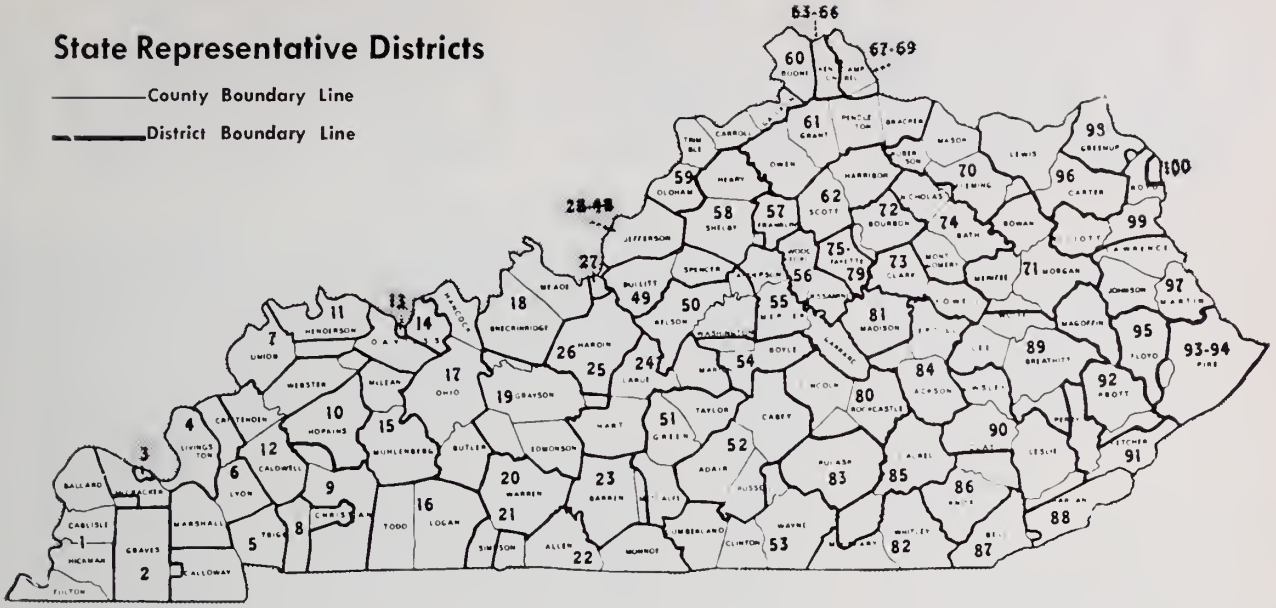
There are 30 Democratic Senators and 8 Republicans and there will be 8 new members in the 1976 Senate. The House is composed of 28 Democrats and 22 Republicans, with 31 Representatives new to the House.

KENTUCKY GENERAL ASSEMBLY 1976 Senate Roster

District	Senators
1	Richard Weisenberger (D), Mayfield
2	Tom Garrett (D), Paducah
3	Pat McCuiston (D), Pembroke
4	William L. Sullivan (D), Henderson
5	Joe Wright (D), Harned
6	Kenneth O. Gibson (D), Madisonville
7	W. L. Quinlan (D), Louisville
8	Delbert Murphy (D), Owensboro
9	Walter A. Baker (R), Glasgow
10	Joseph W. Prather (D), Vine Grove
11	Donald L. Johnson (R), Ft. Thomas
12	Joe Graves (R), Lexington
13	Michael R. Moloney (D), Lexington
14	William R. Gentry, Jr. (D), Bardstown
15	John D. Rogers (R), Somerset
16	Doug Moseley (R), Columbia
17	Bert Ed Pollitte (D), Harlan
18	Nelson R. Allen (D), Russell
19	Tom Mobley (D), Louisville
20	Tom Easterly (D), Frankfort
21	Gene Huff (R), London
22	John Faris Lackey (D), Richmond
23	Gus Sheehan, Jr. (D), Covington
24	Clyde Middleton (R), Covington
25	Lowell T. Hughes (D), Ashland
26	John M. Berry, Jr. (D), New Castle
27	Woodrow Stamper (D), West Liberty
28	Walter Strong (D), Beattyville
29	Jim Hammond (D), Prestonsburg
30	Thomas M. Ward (D), Versailles
31	Kelsey E. Friend (D), Pikeville
32	Frank Miller (D), Bowling Green
33	Georgia M. Powers (D), Louisville
34	Daisy Thaler (D), Louisville
35	David K. Karem (D), Louisville
36	Eugene P. Stuart (R), Prospect
37	Danny Yocum (D), Louisville
38	Nicholas Baker (D), Louisville

1976 House Roster

District	Representatives
1	Ward Burnett (D), Fulton
2	Lloyd Clapp (D), Wingo
3	Fred Morgan (D), Paducah
4	T. W. Boatwright, Jr. (D), Paducah
5	Kenneth C. Imes (D), Murray
6	J. R. Gray (D), Benton
7	Joe McBride (D), Waverly
8	H. Ramsey Morris, Jr. (D), Hopkinsville
9	James E. Bruce (D), Hopkinsville
10	William T. Brinkley (D), Madisonville
11	Gross C. Lindsay (D), Henderson
12	Joe Head (D), Providence
13	Charles S. Wible (D), Owensboro
14	Donald J. Blandford (D), Philpot
15	Eugene Doss (D), Central City
16	Lewis Foster (D), Lewisburg
17	Willard Allen (R), Morgantown
18	Mary Ann Tobin (D), Irvington
19	G. W. Vincent (D), Leitchfield
20	Jody Richards (D), Bowling Green
21	Buddy Adams (D), Bowling Green
22	Richard A. Turner (R), Tompkinsville
23	Bobby H. Richardson (D), Glasgow
24	Sam B. Thomas (D), Lebanon
25	Allene A. Craddock (D), Elizabethtown
26	Nick L. Pearl (D), Radcliff
27	Archie N. Romines, Sr. (D), Valley Station
28	James R. Dunn (D), Louisville
29	Al Bennett (D), Louisville
30	Jon W. Ackerson (R), Louisville
31	Mark D. O'Brien (D), Louisville
32	Bruce Blythe, Jr. (R), Louisville
33	Bob Benson (D), Louisville
34	Gerta Bendl (D), Louisville
35	Carl A. Nett (D), Louisville



36 Michael W. Wooden (D), Louisville
37 Jerry Kleier (DI, Louisville
38 Dexter S. Wright (R), Louisville
39 Lawrence Ray Maynard (D), Louisville
40 George R. Siemens, Jr. (D), Louisville
41 Mae Street Kidd (D), Louisville
42 Charlotte S. McGill (D), Louisville
43 Norbert L. Blume (D), Louisville
44 James B. Yates (DI, Louisville
45 Dottie Priddy (D), Louisville
46 Robert F. Hughes (D), Louisville
47 Edward L. Holloway (R), Middletown
48 Louis R. Guenthner (R), Louisville
49 Thomas B. Givhan (D), Shepherdsville
50 John Hurst (D), Bloomfield
51 Herman W. Ratliff (R), Campbellsville
52 Raymond Overstreet (R), Liberty
53 Charles Hardwick (RI, Betsey
54 Joe Clarke (D), Danville
55 Forest Sale (D), Harrodsburg
56 John V. Carpenter, Jr. (D), Nicholasville
57 C. M. Hancock (D), Frankfort
58 David Gray Mason (D), Eminence
59 Robert A. Jones (D), Crestwood
60 William K. McBee (DI, Burlington
61 Clay Crupper (D), Dry Ridge
62 Mark Fitzgerald (D), Cynthiana
63 Louis DeFalaise (R), Ft. Mitchell
64 Phillip E. King (D), Ft. Mitchell
65 John J. Isler (D), Covington
66 Elmer C. Dietz (D), Ludlow
67 Terry L. Mann (D), Newport
68 William Donnermeyer (D), Bellevue
69 Arthur L. Schmidt (R), Cold Spring
70 Mitchel B. Denham, M.D. (D), Maysville
71 Woodford May (DI, Woodsbend
72 Jim LeMaster (D), Lexington
73 Paul W. Richardson (D), Winchester
74 Adrian Arnold (DI, Mt. Sterling
75 William G. Kenton (D), Lexington
76 Steven L. Beshear (D), Lexington
77 Glenna A. Bevins (D), Lexington
78 Larry J. Hopkins (R), Lexington
79 Don W. Stephens (D), Lexington
80 William Harold DeMarcus (R), Stanford
81 Dwight Wells (D), Richmond
82 Ernie Siler (R), Williamsburg
83 Lavey Floyd (R), Pointer
84 Charles P. Muncy (R), Irvine
85 Albert Robinson (RI, Pittsburg
86 Jimmy White (DI, Barbourville
87 George E. Stewart (DI, Pineville
88 Glenn R. Freeman (DI, Cumberland
89 John Raymond Turner (D), Jackson
90 Clay Gay (R), Hyden
91 Hoover Dawahare (D), Whitesburg
92 Sidney Adams (D), Littcarr
93 N. Clayton Little (D), Hartley
94 Herbert Deskins, Jr. (D), Pikeville
95 James Allen (D), Martin
96 Jackie Ray Cooper (R), Vanceburg
97 W. D. Blair (R), Paintsville
98 Ronald R. Cyrus (DI, Greenup
99 Ray O. Brown (D), Sandy Hook
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In Memoriam

HERMAN B. STRULL, M.D.
Louisville
1890-1975

Herman Bernard Strull, M.D., died on October 11 at the age of 76. A native of Russia and a 1918 graduate of the College of Physicians and Surgeons in St. Louis, Doctor Strull was a general practitioner. He was an emeritus member of the Jefferson County Medical Society and Kentucky Medical Association.

RUSSELL L. HALL, M.D.
Prestonsburg
1914-1975

Russell Lowell Hall, M.D., 62, died on October 24. A 1942 graduate of the University of Louisville School of Medicine, Doctor Hall was a public health physician in Floyd and Martin counties. He was an emeritus member of the Kentucky and American Medical Associations.

WIBLE S. CARTER, M.D.
Louisville
1893-1975

Wible Stewart Carter, M.D., died on November 29 at the age of 82. A 1914 graduate of the University of Louisville School of Medicine, Doctor Carter practiced general medicine in Louisville. He was a member of the Jefferson County Medical Society and the Kentucky Medical Association.

WILLIAM P. EUBANK, SR., M.D.
Louisville
1919-1975

William Procter Eubank, Sr., M.D., 56, died on December 10. An obstetrician-gynecologist, Doctor Eubank graduated from the University of Louisville in 1943. He was a member of the Jefferson County Medical Society and the Kentucky Medical Association, as well as the American College of Obstetrics and Gynecology.

NEWS ITEMS

Thomas M. Jarboe, M.D., Lexington, is the new President of the Kentucky Thoracic Society. Other officers of the medical arm of the Kentucky Lung Association include: **Emery E. Lane, M.D.,** Louisville, President-Elect, and **Richard P. O'Neill, M.D.,** Lexington, Secretary-Treasurer.

PRESCRIBING INFORMATION

Antiminth (pyrantel pamoate) Oral Suspension

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13μg/ml.) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg. of pyrantel base/ml.) should be administered in a single dose of 11 mg. of pyrantel base per kg. of body weight (or 5 mg./lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 cc. of Antiminth per 10 lb. of body weight. (One teaspoonful = 5 cc.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

How Supplied. Antiminth is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg. pyrantel base per ml., supplied in 60 cc. bottles and Unitcups™ of 5 cc. in packages of 12.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

WORMS BLITZED



A single dose of Antiminth (1 cc. per 10 lbs. of body weight, 1 tsp./50 lbs.—maximum dose, 4 tsp.=20 cc.) offers highly effective control of *both* pinworms and roundworms.

Antiminth has been shown to be extremely well tolerated by children and adults alike in clinical studies.* Pleasantly caramel-flavored, it is non-staining to teeth and oral mucosa on ingestion... doesn't stain stools, linen or clothing.

One prescription can economically treat the entire family.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

NSN 6505-00-148-6967

Pinworms, roundworms controlled with a single, non-staining dose of

ANTIMINTH®

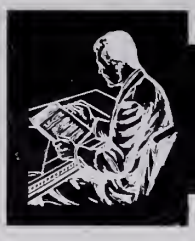
(pyrantel pamoate)

equivalent to 50 mg. pyrantel/ml.

ORAL SUSPENSION

*Data on file at Roerig.

Please see prescribing information on facing page



MATERNAL MORTALITY



From the Files of the KMA Maternal Mortality Study Committee

CASE 2-74. The patient was a 16-year-old, married, white female, Gravida I, Para 0. She was admitted to a 331-bed hospital at 2:45 a.m. on June 23, 1974. At that time she was having contractions described as weak, but occurring every 30 minutes. Weight was 175 lbs., temperature 97.6, pulse 88, respiration 20, blood pressure 154/90. Vaginal examination upon admission revealed the membranes intact, cervix 100% effaced. The fetal vertex was found to be -2 station and the cervix dilated 2 cm. Uterine contractions became irregular with no change in cervical dilatation, on the 24th of June. An infusion was started with 10 units of Oxytocin and 1000 cc of 5% dextrose and water, at 12:05 p.m. She began having contractions every three to four minutes and at 12:50 p.m. the cervix was 5 cm dilated. At 3:10 p.m. the membranes were bulging and ruptured spontaneously. Fetal heart tones were good at 160. At 5:20 p.m. the contractions were every three minutes, cervix found to be 7-8 cm dilated with the presenting part at 0 station. At 6:15 p.m. there was just an anterior lip of the cervix and the presenting part was at station 1+.

While being moved to the delivery room a convulsion occurred. The blood pressure was found to be 180/120. A consultant was called. He ordered 10 cc of $MgSO_4$ IM, 15 mg of Morphine was to be given intravenously very slowly. The patient was comatose when examined by him. Blood pressure was 180/120. The diagnosis was eclampsia and delivery performed. Under a general anesthesia, a 5 lb 8 oz living male was delivered with low forceps, midline episiotomy was done. It became apparent that she had a multiple gestation. The second twin was delivered by high forceps. This male child weighed 6 lb 12 oz. The delivery was described as difficult since the vertex was at the level of the pelvic brim with a face presentation. The head was flexed and forceps were applied with a traction bar for a very difficult extraction. After delivery the patient had another seizure and an additional 10 cc of $MgSO_4$ was given intravenously. It was noted that the patient's blood was very dark even though the patient was ventilated with positive pressure oxygen. Episiotomy was repaired and an intravenous fluid line could not be instituted, therefore, a cutdown was performed at 8:30 p.m.

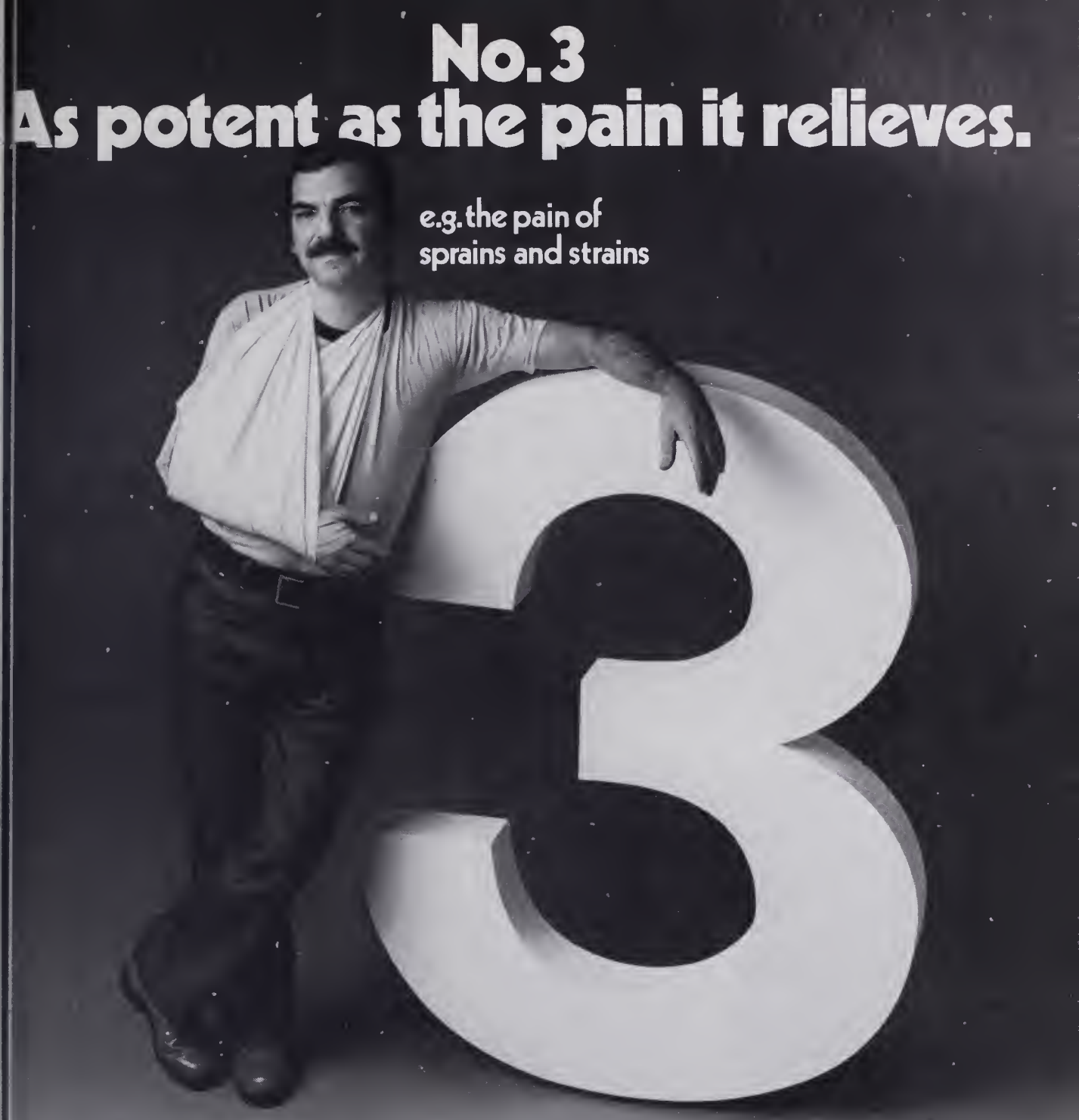
It was noted at the time that the patient was having vaginal bleeding which was described as more than average. Twenty units of Oxytocin was given intravenously. It was noted that in areas where the intravenous was attempted echymotic areas developed. The tentative diagnosis was eclampsia and amniotic fluid embolism, with disseminated intravascular clotting. Fibrinogin level was 95 mgs% and the blood pressure at this time was 80/0. Glucocorticoids were administered as was sodium bicarbonate intravenously. Five units of blood were given and an additional 3 gm of Fibrinogin were given intravenously. She was noted to have irreversible brain damage and another consultant was called. She was transferred to the intensive care unit and expired at 12:30 a.m. the 26th of June, 1974.

An autopsy was requested but refused. The cause of death was felt to be amniotic fluid embolism with irreversible shock.

Comments

The Maternal Mortality Committee studied this protocol and ruled that this was a direct obstetrical death with preventable factors. It is to be emphasized that the procedure of high forceps delivery has no role in modern obstetrics. It was felt that the disseminated intravascular clotting could have been the result of eclampsia, since it is known that this can occur. It is doubtful that she really did have an amniotic fluid embolism. However, with the evidence presented we cannot be certain of this. The treatment for eclampsia perhaps was inadequate although the main problem here would seem to be that of a very difficult delivery, most likely laceration of the genital tract occurred with resultant hemorrhage. It was felt by certain committee members that internal podalic version would have been a better method to deliver the second twin.

No. 3
As potent as the pain it relieves.



OT TOO LITTLE
as potent as the pain you need to relieve in patients with fractures, sprains, strains, wounds, contusions, and the pain of surgical convalescence
unlike acetaminophen/codeine combinations, it does not sacrifice anti-inflammatory action

OT TOO MUCH
potent—yet not excessive ■ addiction liability low

NOT TOO EXPENSIVE
- brand-name quality, yet reasonable in cost
- readily available in both hospital and local pharmacies

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- telephone Rx in most states, up to 5 refills in 6 months at your discretion (where state law permits)

EMPIRIN® COMPOUND WITH CODEINE NO. 3

deine phosphate* (32 4 mg) gr ½
ch tablet also contains: aspirin gr 3½, phenacetin gr 2½, caffeine gr ½. *Warning—may be habit-forming

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Effectiveness across the spectrum of most common forms of insomnia

Awake too long, awake too often, awake too early...

These are the most common forms of insomnia, and may occur singly or in any combination. The night of troubled sleep depicted here comprises all three types. As the night progresses from left to right, each sleep stage is identifiable by its own shade of gray. Blue represents "Awake."

As you can see, this hypothetical "patient" takes well over an hour to fall asleep, awakens several times during the middle of the night and awakens too early in the morning.

Sleep Stages

- Awake
- REM
- Stage 1
- Stage 2
- Stage 3
- Stage 4



The insomnias most often occurring in young and older adults

For patients with trouble falling asleep (common in young adult insomnia patients), Dalmane (flurazepam HCl) 30 mg provides sleep within 17 minutes, on average. For those with trouble staying asleep or sleeping long enough (common in those over 50), Dalmane offers increased total sleep time with fewer nocturnal awakenings. These clinical results were demonstrated in studies conducted in four geographically separated sleep research laboratories[1-4]

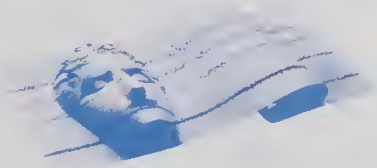
The relative safety of Dalmane (flurazepam HCl) is well documented

Dalmane (flurazepam HCl) is relatively safe and well tolerated; morning "hang-over" has been infrequent. The usual adult dosage is 30 mg; in elderly or debilitated patients, limit initial dosage to 15 mg to preclude over-sedation, dizziness or ataxia. Caution patients about possible combined effects with alcohol and other CNS depressants.

Broad-spectrum medication for the most common forms of insomnia



Awake too early



Dalmane®
(flurazepam HCl)

One 30-mg capsule *h.s.*— usual adult dosage
(15 mg may suffice in some patients).
One 15-mg capsule *h.s.*— initial dosage for elderly or debilitated patients.

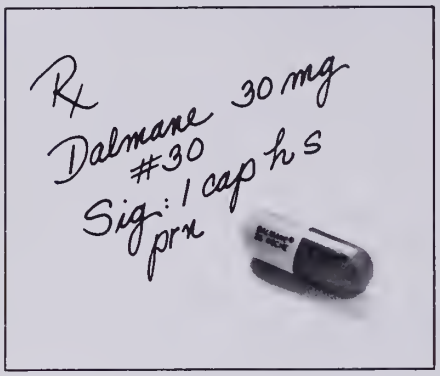
- □ induces sleep rapidly
- □ reduces nighttime awakenings
- □ lengthens total sleep time

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Please see following page for a summary of complete product information.

Broad-spectrum medication for the most common forms of insomnia

Dalmane®
(flurazepam HCl) ℞



Objectively proved in the sleep research laboratory, Dalmane

- □ induces sleep within 17 minutes, on average
- □ reduces nighttime awakenings
- □ provides 7 to 8 hours sleep, on average, without repeating dosage

Before prescribing Dalmane (flurazepam HCl), please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

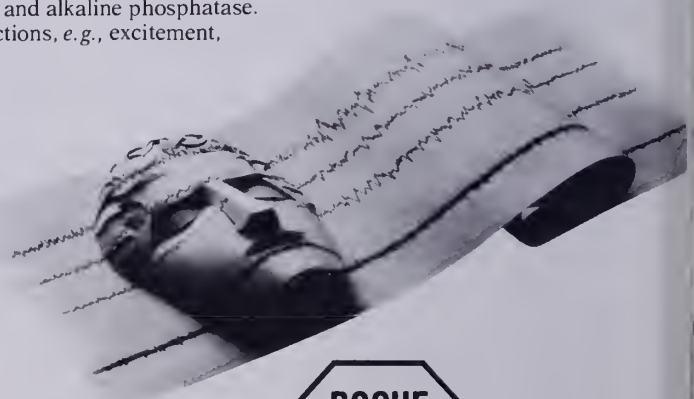
Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Dosage: Individualize for maximum bene effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

REFERENCES:

1. Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington DC, May 3-7, 1971
2. Frost JD Jr: A system for automatically analyzing sleep. Scientific exhibit at the 24th Clinical Convention of the American Medical Association, Boston, Nov 29-Dec 2, 1970; and at the 42nd annual scientific meeting of the Aerospace Medic Association, Houston, Apr 26-29, 1971
3. Vogel GW: Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ
4. Dement WC: Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ



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LIBRIUM®
(chlordiazepoxide HCl)

FOR ALL THE RIGHT REASONS.

- prompt and specific action
- documented benefit-to-risk ratio
- three dosage strengths to meet most therapeutic needs



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.
Contraindications: Patients with known hypersensitivity to the drug.
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.
Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.
Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.
Usual Daily Dosage: Individualize for maximum beneficial effects. *Oral—Adults:* Mild and moderate anxiety and tension, 5 or 10 mg *t.i.d.* or *q.i.d.*; severe states, 20 or 25 mg *t.i.d.* or *q.i.d. Geriatric patients:* 5 mg *b.i.d.* to *q.i.d.* (See Precautions.)
Supplied: Librium® (chlordiazepoxide HCl) *Capsules*, 5 mg, 10 mg and 25 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10. Libritabs® (chlordiazepoxide) *Tablets*, 5 mg, 10 mg and 25 mg—bottles of 100 and 500. With respect to clinical activity, capsules and tablets are indistinguishable.

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Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

LIBRIUM®
chlordiazepoxide HCl/Roche
5 mg, 10 mg, 25 mg capsules

Please see following page.

LIBRIUM®
(chlordiazepoxide HCl)

FOR ALL THE RIGHT REASONS.

Yesterday's decision to use Librium for a clinically anxious patient was based on several good reasons. Safety. Effectiveness. Versatility. And the reasons you chose it yesterday are as valid today.

Librium has accumulated an unsurpassed clinical record. A record validated in several thousand papers published both here and abroad.

Librium, when used in proper dosage, rarely interferes with a patient's mental acuity or ability to perform. However, as with all CNS-acting agents, good medical practice suggests that patients be cautioned against hazardous activities requiring complete mental alertness.

Librium has an established safety record and a documented benefit-to-risk ratio. And Librium is used concomitantly with such drugs as cardiac glycosides, diuretics, anticholinergics and antacids.

So when you consider antianxiety therapy, consider Librium. It's a good choice. For today. And tomorrow.



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PROVEN ADJUNCT FOR CLINICAL ANXIETY

LIBRIUM® C.V.

chlordiazepoxide HCl/Roche

Please see preceding page for summary of product information.



MDS

The Journal of The KENTUCKY Medical Association

COLLEGE OF PHYSICIANS
OF PHILADELPHIA
FEB 25 1976

Metastatic Carcinoma in Axillary Nodes Without Evidence of a Primary Mammary Lesion
Mary Ann Coffee, B.A. and William Jernigan, M.D. 69

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Both often



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.



Valium® (diazepam) IV

2-mg, 5-mg, 10-mg scored tablets

in psychoneurotic anxiety states with associated depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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Twenty-Second Annual Symposium on Cardiovascular Diseases

March 31 and April 1, 1976

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Robert R. Goodin, M.D., Chairman

UNIVERSITY OF LOUISVILLE HEALTH SCIENCES CENTER — LOUISVILLE, KY.

Wednesday, March 31, 1976

8:30- 9:00 a.m. REGISTRATION — U/L Health Sciences Center

WELCOME . . . Robert R. Goodin, M.D., Chairman

MORNING SESSION — Jesse B. Bell, M.D., Presiding

9:00- 9:45 a.m. **"What is Cardiomyopathy?"**
RALPH SHABETAI, M.D., Professor of Medicine, Director of the Hemodynamic Laboratories, Chief, Cardiology Section, VA Hospital, Lexington, Kentucky

9:45-10:30 a.m. **"The Diagnosis and Management of Alcoholic Cardiomyopathy"**
R. JOE NOBLE, M.D., Associate Professor of Medicine, Indiana University School of Medicine Research Associate, Krannert Institute of Cardiology, Indianapolis

10:30-11:00 a.m. COFFEE BREAK

11:00-11:45 a.m. **"The Diagnosis and Management of Acute Pericarditis"**
R. BRUCE LOGUE, M.D., Professor of Medicine (Cardiology), Emory University School of Medicine, Atlanta

12:00- 1:00 p.m. "GRAND ROUNDS" U/L Health Sciences Center (Case of acute myopericarditis or other)
RALPH SHABETAI, M.D., R. JOE NOBLE, M.D., R. BRUCE LOGUE, M.D., NANCY C. FLOWERS, M.D., Moderator

AFTERNOON SESSION — Donne DeMunbrun, M.D., Presiding

2:00- 2:45 p.m. THE BERNARD D. ROSENBLUM MEMORIAL LECTURE
"A Clinician's View of Coronary Artery Surgery"
R. BRUCE LOGUE, M.D.

2:45- 3:15 p.m. **"Long Term Results of Prosthesis Surgery in Valvular Heart Disease"**
JAMES R. PLUTH, M.D., Consultant in Cardiovascular Surgery, Mayo Clinic, Assistant Professor of Surgery, Mayo Graduate School of Medicine, Rochester

3:15- 4:00 p.m. **"The Clinical Spectrum of Barlow Syndrome"**
R. JOE NOBLE, M.D.

4:00- 4:30 p.m. PANEL
R. Bruce Logue, M.D., R. Joe Noble, M.D., James Pluth, M.D., Ralph Shabetai, M.D., Allan M. Lansing, M.D., Moderator

Thursday, April 1, 1976

8:30- 9:00 a.m. REGISTRATION — U/L Health Sciences Center

MORNING SESSION — Jacqueline A. Noonan, M.D., Presiding

9:00- 9:45 a.m. **"The Role of Risk Factors in CAD, Does Intervention Help?"**
WILLIAM B. KANNEL, M.D., Director, Framingham Heart Study, NHLI, Lecturer in Preventive Medicine, Harvard Research Associate, Boston University, Framingham, Mass.

9:45-10:30 a.m. **"Arrhythmias During the Prehospital Phase of Acute Myocardial Infarction"**
H. JOEL GORFINKEL, M.D., Assistant Professor of Medicine, Associate Director, University Hospital Coronary Care Unit, The George Washington University Medical Center, Washington, D.C.

10:30-11:00 a.m. COFFEE BREAK

11:00-11:45 a.m. **"Post Myocardial Infarction Rehabilitation"**
GERALD F. FLETCHER, M.D., Director of Internal Medicine, Georgia Baptist Medical Center and Professor of Medicine, Emory University School of Medicine, Atlanta

11:45-12:45 p.m. **"Current Status of Saph. Vein Bypass Graft Surgery"**
JAMES PLUTH, M.D.

AFTERNOON SESSION — Nancy C. Flowers, M.D., Presiding
DIAGNOSTIC TECHNIQUES IN CARDIOLOGY

2:00- 2:30 p.m. **"The Role of Stress Electrocardiography"**
SAMUEL M. FOX, III, M.D., Director, Cardiac Exercise Laboratory, Georgetown University Medical Center, Washington, D.C.

2:30- 3:00 p.m. **"Echocardiography"**
ARTHUR E. WEYMAN, M.D., Department of Medicine, Cardiology Division, Indiana University School of Medicine, Indianapolis

3:00- 3:30 p.m. **"His Bundle Recording and Right Atrial Pacing Studies"**
H. JOEL GORFINKEL, M.D.

3:30- 4:00 p.m. PANEL
Samuel M. Fox III, M.D., H. Joel Gorfinkel, M.D., Arthur Weyman, M.D., Terry W. Henkel, M.D., Moderator

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MESSAGE FROM THE PRESIDENT



Changing Times—Collisions of Ideas

TWENTY years ago I returned to Kentucky to do my thing—to practice medicine under a free enterprise doctor-patient relationship with the patient responsible for his own health care. Today I am caught up in a swirl of conflicting and confusing concepts—PSRO, Health Service Areas, Certificate of Need, Medicaid, Medicare, HMO's, KEMPAC, AMPAC, Continuing Education, Recertification, etc. Chaos has replaced stability, my individualism stifled, my economic base threatened, my future niche questionable.

Historically when an idea's time has arrived, there is no stopping it. The idea has been the medical profession's goal forever—quality health care for all the people. The basic question is can the nation afford the ever growing sophisticated and expensive capabilities we can deliver. The basic change has been a shift of responsibility by many people to the government, so that it is a doctor-patient-government relationship.

The final system has yet to be set, but it is later than we think. The recession and limitation of dollars have retarded the politicians voting through National Health Insurance. In fact, insufficient dollars exist to finance what has already been promised. As a result, our fees are restricted, and multiple different concepts are being offered as alternative delivery systems.

To achieve our goal of quality health care for all of the people, the physicians are a key. We are going to have to look realistically at our economic efficiency, avoid duplication of tests, cut hospital lengths of stay, do more outpatient work, etc. With Blue Cross and Blue Shield both running in the red, these efforts are essential. What if Blue Shield runs out of money, and physicians aren't paid? We must help the private sector survive.

To have a voice in government, we should become a cohesive political power. Are the physicians willing to participate in politics and financially contribute? Or are we going to stand complaining on the sidelines while the social planners totally control us? Our political potential is enormous—in Kentucky 3,500 physicians plus 1,700 dentists.

We do have choices. Let's hope we'll fight for our individual freedom by getting together and exercising true leadership in health care.

John P. Stewart, M.D., Chairman
KMA Board of Trustees

This is the second in a series of articles written at the request of KMA President, David A. Hull, M.D.

POSTGRADUATE OPPORTUNITIES

IN KENTUCKY

FEBRUARY

13-14 2nd International Symposium on Psychopharmacology, University of Louisville, Health Sciences Center, Louisville

22-28 Sixth Family Medicine Review, Session III,* Registration fee: $245. University of Kentucky Medical Center, Lexington

25 "Pre- and Postoperative Pulmonary Problems,"** Health Sciences Center, University of Louisville School of Medicine, Louisville

27 "Breast Cancer Management Symposium and Workshop,** University of Louisville School of Medicine, Health Sciences Center, Louisville

28 12th Annual Symposium on Oropharyngeal Cancer, University of Louisville School of Medicine, Health Sciences Center Auditorium, Louisville

MARCH

18 "Medical-Surgical Complications in Diabetes,"** Health Sciences Center, University of Louisville School of Medicine, Louisville

24 "Management of Gastrointestinal Bleeding,"** Suburban Hospital, Louisville

25-26 Sports Medicine Seminar, sponsored by KMA and Kentucky High School Athletic Association, Executive Inn, Louisville.

31-April 1 22nd Symposium on Cardiovascular Diseases, Heart Association of Louisville and Jefferson County, Health Sciences Center, Louisville

APRIL

12-14 "Frontiers of Medical Science: The Clinician as Translator," American College of Physicians and University of Kentucky College of Medicine. Contact: Registrar, Postgraduate Courses, ACP, 4200 Pine Street, Philadelphia, Pa. 19104.

22-24 "Diagnosis and Management of High Risk Pregnancy,"** Health Sciences Center, University of Louisville, Louisville

22-26 "Modern Management of Major Problems in Surgery," University of Louisville School of Medicine. Contact: Hiram C. Polk, Jr., M.D., Department of Surgery, University of Louisville, Health Sciences Center, Louisville 40201.

23-24 "Management of Diabetic Complications,"* University of Kentucky Medical Center, Lexington

28 "Cardiac Drugs,"** Health Sciences Center, University of Louisville, Louisville

28-30 "Gastrointestinal Radiology Symposium,"* University of Kentucky Medical Center, Lexington Hilton Inn, Lexington

MAY

19-20 Annual Meeting, Kentucky Chapter, American Academy of Pediatrics, Big Spring Country Club, Louisville

19-20 Annual Assembly, Kentucky Academy of Family Physicians, Ramada Inn, Louisville

26 "Immunology and Malignant Disease,"** St. Anthony Hospital, Louisville

IN SURROUNDING STATES

APRIL

21-23 "Clinical Diagnosis and Therapy of Lung Disease," Cleveland Clinic, Cleveland

21-23 "Endocrinology: Clinical and Scientific Aspects," American College of Physicians, Vanderbilt University, Nashville

MAY

5-6 11th Annual Indiana Multidisciplinary Child Care Conference, Marriott Inn, Indianapolis. Contact: Morris Green, M.D., 1100 West Michigan St., Indianapolis 46202

1976

MARK YOUR CALENDAR

June 2-3, Emergency Health Care Seminar, Executive West, Louisville

June 26-July 1, AMA Annual Convention, Dallas

September 27-30, KMA Annual Meeting, Ramada Inn, Bluegrass Convention Center, Louisville

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**For further information, contact: Frank R. Lemon, M.D., Associate Dean for Continuing Education, University of Kentucky College of Medicine, Lexington 40506*

***For further information contact: Gerald D. Swim, Executive Director, Office of Continuing Education, University of Louisville School of Medicine, Louisville 40202*

Report From KMA Cancer Committee--

Endometrial Carcinoma*

WHILE the prospects for controlling cancer of the uterine cervix are bright, the committee is concerned that endometrial cancer is still taking its toll. The ratio of cervix to endometrial cancer has decreased since 1962 from 2.6:1 to 0.8:1 in Jefferson County. Prior to that, ratios of 8:1 or higher were often quoted.[1]

The salutary effects of mass screening noted in last month's report on cervix cancer has not been reflected in either endometrial cancer incidence or mortality. In fact, the yearly average age adjusted incidence rates for endometrial carcinoma have increased to 15.3 from 13.2 per 100,000 women age 20 years and over during the period 1953-1973.

While the routine Pap test has directly benefited some women with endometrial cancer by virtue of earlier diagnosis, the method as it is routinely used produces cancer cells in less than half of the cases examined. This is true even when the patient has symptomatic or even late disease. The special methods developed for obtaining cells directly from the endometrial cavity, while to an extent effective, have failed to gain popularity for several reasons. Most are either too complicated or time consuming for full utilization in routine screening. The cost of the various devices is significant. The methods are not totally without pain or discomfort to the patient, especially in older women where the cancer risk is greatest. In patients with atrophy of the cervix and a tight os a suitable sample often cannot be obtained. While the Committee recognizes the need for further research and development of more acceptable methods for obtaining endometrial samples, it believes we can make better progress at the moment by other avenues of approach.

Eighty-four percent of all cases of endometrial carcinoma occur after age 50, and over 96% occur in women age 40 and over. In a retrospective review almost 90% presented with abnormal perimenopausal or postmenopausal bleeding. Only two percent denied symptoms and another two percent had no recording of symptoms.[2] The important point is that those who have little delay in endometrial sampling after the onset of symptoms by and large have early lesions. Furthermore, early endometrial cancer is a highly curable disease. In spite of the generally held optimistic outlook for curing endometrial carcinoma the overall five-year survival rate on 18,-507 cases reported by the International Federation of Gynecology and Obstetrics was only 59%.[3]

There are, of course, other causes of abnormal perimenopausal and postmenopausal bleeding. Prominent among them are adenomatous and atypical endometrial hyperplasia. Both are known to be highly significant risk factors for future endometrial carcinoma. Risk factors also include sterility or nulliparity, obesity and a long history of menstrual irregularity.

In view of the above considerations the Committee recommends an all out effort to investigate abnormal uterine bleeding, without delay in all perimenopausal and especially in postmenopausal women with abnormal uterine bleeding. It also recommends treatment and careful follow-up of women whose bleeding resulted from endometrial hyperplasia rather than from cancer. Furthermore, it recommends that women age 40 years and over with a history indicating the other extra high risk factors be kept under careful surveillance including endometrial sampling.

This article was written by William M. Christopherson, M.D., University of Louisville School of Medicine.

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2. Christopherson, W.M., Mendez, W.M., Parker, J.E., Lundin, F.E. Jr., and Ahuja, E.M.: Carcinoma of the Endometrium: A Study of Changing Rates Over a 15-Year Period. *Cancer* 27:1971, 1005-1008.
3. Kottmeier, H.L.: Annual Report Gynecologic Cancer. *F.I.G.O.* V 15. Stockholm, Sweden



Testing in Humans: Who, Where & When.

ıe weight of ethical opinion:

Few would disagree that the effectiveness and safety of any therapeutic agent device must be determined through nical research.

But now the *practice* of clinical research is under appraisal by Congress, the ess and the general public. Who shall minister it? On whom are the products be tested? Under what circumstances? nd how shall results be evaluated and ilized?

The Pharmaceutical Manufacturers sociation represents firms that are sigficantly engaged in the discovery and velopment of new medicines, medical vices and diagnostic products. Clinical search is essential to their efforts. Conquently, PMA formulated positions ich it submitted on July 11, 1975, to e Subcommittee on Health of the Sen- Labor and Public Welfare Committee, its official policy recommendations. re are the essentials of PMA's current inking in this vital area.

1. PMA supports the mandate and ssion of the National Commission for e Protection of Human Subjects of omedical and Behavioral Research and fers to establish a special committee mposed of experts of appropriate ciplines familiar with the industry's search methodology to volunteer its rvice to the Commission.

2. PMA supports the formation of an dependent, expert, broadly based and presentative panel to assess the current te of drug innovation and the impact on it of existing laws, regulations and ocedures.

3. When FDA proposes regulations, should prepare and publish in the *Federal Register* a detailed statement assessg the impact of those regulations on ug and device innovation.

4. PMA proposes that an appropriely qualified medical organization be couraged to undertake a comprehenve study of the optimum roles and sponsibilities of the sponsor and physian when company-sponsored clinical search is performed by independent nical investigators.

5. PMA recognizes that the physician-investigator has, and should have, the ultimate responsibility for deciding the substance and form of the informed consent to be obtained. However, PMA recommends that the sponsor of the experiment aid the investigator in discharging this important responsibility by providing (1) a document detailing the investigator's responsibilities under FDA regulations with regard to patient consent, and (2) a written description of the relevant facts about the investigational item to be studied, in comprehensible lay language.

6. In the case of children, the sponsor must require that informed consent be obtained from a legally appropriate representative of the participant. Voluntary consent of an older child, who may be capable of understanding, in addition to that of a parent, guardian or other legally responsible person, is advisable. Safety of the drug or device shall have been assessed in adult populations prior to use in children.

7. PMA endorses the general principle that, in the case of the mentally infirm, consent should be sought from both an understanding subject and from a parent or guardian, or in their absence, another legally responsible person.

8. Pharmaceutical manufacturers sponsoring investigations in prisons must take all reasonable care to assure that the facilities and personnel used in the conduct of the investigations are suitable for the protection of participants, and for the avoidance of coercion, with a respect for basic humanitarian principles.

9. Sponsors intending to conduct nontherapeutic clinical trials through the participation of employee volunteers should expand the membership and scope of its existing Medical Research Committee, or establish such an internal Medical Research Committee, with responsibility to approve the consent forms of all volunteers, designs, protocols and the scope of the trial. The Committee should also bear responsibility to ensure full compliance with all procedures intended to protect employee volunteers' rights.

10. Where the sponsor obtains medical information or data on individuals, it shall be accorded the same confidential status as provided in codes of ethics governing health care professionals.

11. PMA and its member firms accept responsibility to aid and encourage appropriate follow-up of human subjects who have received investigational products that cause latent toxicity in animals or, during their use in clinical investigation, are found to cause unexpected and serious adverse effects.

12. PMA supports the exploration and development by its member companies of more systematic surveillance procedures for newly marketed products.

13. When a pharmaceutical manufacturer concludes, on the basis of early clinical trials of a basic new agent, that a new drug application is likely to be submitted, a proposed development plan accompanied by a summary of existing data, would be submitted to the FDA. Following a review of this submission, the FDA, and its Advisory Committee where appropriate, would meet with the sponsor to discuss the development plan. No *formal* FDA approval should be required at this stage. Rather, the emphasis should be on identification of potential problems and questions for the sponsor's further study and resolution as the program develops.

The PMA believes that health professionals as well as the public at large should be made aware of these 13 points in its Policy on Clinical Research. For these recommendations envisage constructive, cooperative action by industry, research institutions, the health professions and government to encourage creative and workable responses to issues involved in the clinical investigation of new products.

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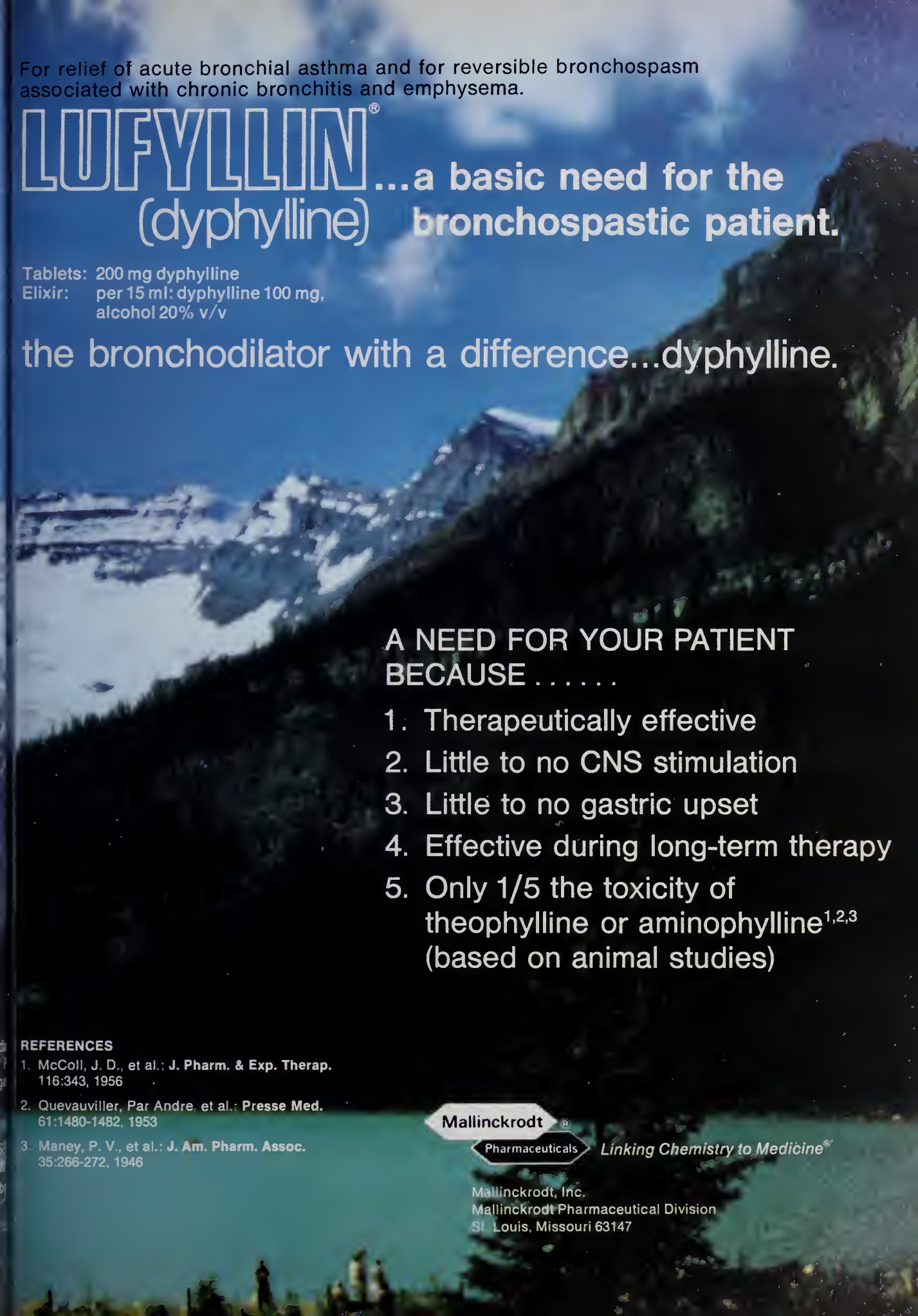
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Metastatic Carcinoma in Axillary Nodes Without Evidence of a Primary Mammary Lesion†

Mary Ann Coffee, B.A. and William R. Jernigan, M.D.
Louisville and Madisonville, Kentucky

A 60-year-old woman presented with an enlarged axillary node and vague gastrointestinal complaints. Histologic examination of the axillary mass disclosed metastic adenocarcinoma, most likely breast primary. A modified radical mastectomy with axillary node dissection yielded positive results in all 26 axillary lymph nodes and a normal breast. Discussion of the pathologic significance of this and related cases follows.

OCCULT carcinoma of the breast presenting as an axillary mass without clinical evidence of breast disease is a perplexing diagnostic problem, especially if the patient has vague complaints suggestive of a primary site elsewhere.

Case Report

A 60-year-old childless school teacher presented with a mass in the left axilla discovered five days earlier. Three months before examination she began having intermittent episodes of loose, brackish stools. However, she was taking vitamins that may have contained iron and she had also ingested Pepto-Bismol. At the same time, she also noticed increasing fatigue and decreasing energy with tachycardia. Two months before being seen she had symptoms of an upper respiratory infection, one month before examination she had experienced three or four episodes of diarrhea, nausea and vomiting of one day to one week's duration. There was also one episode of right upper quadrant pain lasting overnight. On physical examination, a 3 cm mass was palpated in the left axilla, firm and barely movable; the mass did not seem fixed to the chest wall or skin. The abdomen was unremarkable. The patient's father had died at age 82 of pancreatic carcinoma.

Chest x-ray film, CBC and urinalysis were normal, as were bilateral mammograms. Upper GI series with small bowel follow-through, cholecystogram, air-contrast colon study and proctoscopy to 25 cm were all normal. Febrile agglutinins were negative.

Five days after initial examination the left axillary mass was biopsied; frozen section showed carcinoma. Histologic study of the fixed specimen disclosed metastatic carcinoma consistent with primary carcinoma of the breast. At this time two stools were found positive for occult blood; two were negative. Total body bone scan and intravenous pyelogram were both normal. An esophagogastroduodenoscopy demonstrated a small sliding hiatal hernia with a moderate amount of esophagogastritis.

Four days later a left modified radical mastectomy with axillary dissection was performed. Metastatic carcinoma consistent with primary

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carcinoma of the breast was found in all 26 axillary nodes dissected. *There was no evidence of carcinoma in the breast tissue proper.* Specimen mammography was not done.

The patient was started on chemotherapy (5-FU, methotrexate, Cytoxan and Oncovin) a month after the procedure; she is tolerating it well. She has gained approximately 10 pounds in the six months following operation.

Discussion

Carcinoma of the breast presenting as an axillary mass without clinical evidence of breast disease was first discussed by Halsted[1] in 1907 and Cameron[2] in 1909, who both advocated removal of the ipsilateral breast. Feuerman et al[3] presented a 12-year study of metastatic disease to the axilla in 21 patients, 14 of whom were women. Eleven had breast carcinoma, although a primary carcinoma could not be demonstrated in three patients. None of the men had breast carcinoma. In all patients with an extramammary source, there were unequivocal signs and symptoms pointing to the origin so that by the time the carcinoma reached the axilla the primary lesion was no longer "occult."

In a joint study with Westbrook and Gallager,[4] Copeland and McBride[5] did not find this to be true in 60 patients at the University of Texas at Houston M. D. Anderson Hospital and Tumor Institute over a 20-year period. Very few of their patients had signs pointing to the primary lesion. Eighteen were eventually treated for mammary cancer, 2 of whom demonstrated no primary site, as reported by Westbrook and Gallager.[4] Of the other 42, 24 died without a primary site having ever been found, and nine are still living without evidence of disease. Most of the biopsy samples from these patients had elements suggesting squamous cell carcinoma or amelanotic melanoma. Jackson, in Cogswell's paper,[6] cites a case of liver carcinoma first manifested as an axillary mass and undiagnosed until autopsy.

A review of the literature disclosed only 18 instances of breast carcinoma in which a primary lesion could not be found.[3,5,7-10] Fitts et al[8] contend that the lesions are very minute and could be found if searched for more diligently. Feuerman et al[3], however, could not find a primary site in three of 10 patients even with serial sections 3-4 mm apart. Our specimen was cut into sections 2-5 mm thick. A method for finding occult carcinomas that is gaining popularity is xeroradiography. In 4,183 xeroradiograms by Frankl and Rosenfeld,[11] 133 were found to have carcinoma. Among these, 52 patients had no palpable mass or clinical evidence of breast disease. Only 2% proved falsely negative, whereas in a preceding series of 2,000 mammograms, there were 12% false negatives and only four occult cancers found. In a study of xeroradiography subsequent to and including the first study, Frankl and Rosenfeld[12] have detected 75 occult carcinomas in a group of 7,000 patients. They are now marking the lesions preoperatively and xeroradiographing the unfixed specimens so the pathologist can locate them. Most studies included recommendations of either radical mastectomy alone or, in the more recent reports, radical mastectomy followed by axillary irradiation.

Prognosis is considered better for occult carcinoma with axillary metastasis than for clinically obvious breast carcinoma with axillary metastasis. Fitts et al[8] described five of seven patients surviving more than five years. Owen and colleagues[7] reported that nine of 18 women survived more than five years, with six surviving more than 12 years, and four of these more than 15 years. Most of these patients, however, had fewer than four involved axillary lymph nodes. Haagensen[10] describes four patients, each having more than 20 involved nodes. He attributes the early local recurrence and death from metastases in two patients to fixation to the chest wall or skin in the initial axillary mass, which he considers the most critical prognostic factor.

No treatment for carcinoma of the breast at the present time is without heated debate. Two of the big questions are when breast carcinoma metastasizes and when these metastases should be treated. Frankl and Rosenfeld[12] demonstrated 27% axillary metastasis in 75 patients with occult carcinoma. In our own patient, in whom no primary site was located, all axillary nodes were positive, indicating that she probably has minute metastases even though the bone scan is negative. Recent trials[13-20] with combination chemotherapy have been encouraging. Shrinkage of more than 50% of the tumor mass has been achieved for median times of six to nine months in more than half the patients in the studies. These patients have advanced metastatic breast disease that has failed to respond to prior irradiation or endocrine or hormonal therapy. The responses are even bet-

ter in less advanced stages of the disease. The next step, which we have taken, is prophylactic combination chemotherapy as an adjunct to operation when minute generalized disease is highly suspected.

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Hypercalcemia and Hypoglycemia in Adrenocortical Insufficiency

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Hypercalcemia and hypoglycemia are reported in a case of idiopathic adrenocorticoid insufficiency. This combination, or isolated hypercalcemia, may suggest the diagnosis. The exact etiology of the hypercalcemia remains unknown but probably is related to renal tubular handling of calcium or Vitamin D metabolism.

HYPERCALCEMIA appears to be a somewhat unusual biochemical abnormality associated with adrenocortical insufficiency. Only a few such cases have been published since Loeb's original report in 1932.[1-5] However, hypoglycemia would be expected to occur much more frequently considering the physiological actions of the glucocorticoids. This paper describes a case of acute idiopathic adrenocortical insufficiency presenting with the above combination which indeed seems to be even less frequently observed.[6]

Case Report

A 15-year-old white female, high school student, was referred to St. Joseph's Hospital, Lexington, Kentucky, for evaluation of a "flu-like syndrome" and a recent loss of consciousness in another hospital. According to her parents she had always been a healthy child having the usual childhood diseases without sequelae. However, they commented that she did have a considerable amount of nausea and vomiting dating back to infancy. She did well except for periodic nausea and vomiting and frequent "colds" (four to five per year) up until approximately one year prior to this admission at which time she had an episode of nausea, vomiting, generalized myalgia and fever which was again considered to be a "flu-like syndrome". In addition to the above problems she was noted to be irritable and was having increased difficulties with her teachers and a recent decrease in the performance of her school work. These symptoms recurred and because of this she was admitted to her local hospital. While in the local hospital she was quite restless and tended to cry on several occasions. She also appeared to be depressed. On the morning of admission she was scheduled for an upper GI series and shortly after this lost "consciousness" for a short period of time. A series of blood tests were ordered and the blood sugar was found to be 28 mg%. An intravenous infusion of glucose was initiated and she was transferred to St. Joseph's Hospital for further evaluation.

On arrival at the hospital she was alert and a similar history as above was obtained and confirmed by the mother. On physical examination she appeared acutely and chronically ill. Her pulse rate was 140 per minute, temperature 102.4°, weight 88 pounds, height 58 inches, blood pressure was 92/40 and equal in both upper extremities. The only other positive physical findings noted were as follows: generalized abdominal tenderness, particularly in the right lower quadrant with decreased bowel sounds. Knee jerks and ankle jerks were 2+ bilaterally but the Babinski test was normal. There was no unusual pigmentation of the skin or mucous membranes and the creases within the palms of the hands were within normal limits.

Laboratory results were as follows: hemoglobin 10 gm%, WBC count 5500 with a normal differential, CO_2 21.2 mEq/1, sodium 125 mEq/1, potassium 5.0 mEq/1, chloride 84 mEq/1, amylase 100 units, BUN 46 mg%, calcium 10 mg%, urinalysis normal with the exception of 1 + sugar, VDRL non-reactive, febrile agglutinations were negative, monospot test negative, direct bilirubin 0.4 mg%, indirect bilirubin .3 mg%, SGOT 34 units, protein bound iodine 6.8 mcgm%, total thyroxine (M-P) 12.3 mcgm%, porphobilinogen screening was negative, sedimentation rate 70, LE prep negative, ASO titer 333 TODD units, C-reactive protein negative, prothrombin time 16.3 (control 12 seconds), phosphorous 4.8 mg%, uric acid 9.6 mg, and cholesterol 120 mg%. Total protein and albumin were slightly decreased at 5.8 gm% and 3.2 gm% respectively. Protein electrophoresis showed the alpha 2 fraction to be slightly elevated at 1.2 gm%. An electroencephalogram was performed and showed spiking waves at 3-10 second intervals suggestive of petite mal epilepsy. A chest x-ray and electrocardiogram were interpreted as being within normal limits.

The initial impression was a "viral type" illness with possible adrenal insufficiency. A plasma cortisol level was obtained and following this the patient was started on an infusion of intravenous physiologic saline and hydrocortisone phosphate 100 mg initially and following this, 100 mg every six hours. The following day the plasma cortisol level returned as being under 1 microgram% (PM value). After replacement of the extracellular volume deficit and correction of the electrolyte abnormalities the calcium rose from 10.1 to 12.1 and later 13.5 mg%. The patient was placed on 0.5 mg%

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of dexamethasone p.o. every six hours and 24-hour urine collections were made for 17 ketosteroids and 17 ketogenic steroids. The control collections both returned as being less than 1 mg per 24 hours. A plasma cortisol drawn at 4 p.m. was also recorded as being under 1 microgram%. A standard ACTH (Corticotropin) infusion test[7] was initiated with 500 ml of D_5S and 5 units of ACTH per hour over an eight-hour period beginning at 8 a.m. Plasma cortisol levels drawn at 8 a.m. and 3:30 p.m. on the day of infusion were less than 1 microgram%. There was essentially no increase in 17 ketosteroids or 17 ketogenic steroids over a three-day period of ACTH infusion.

A diagnosis of adrenal insufficiency, primary in type, was made and the patient was placed on Prednisone 5 mg a.m. and 2.5 mg p.m. In addition to this she was given Cortisone Acetate intramusculary 200 mg daily for three days. She showed dramatic improvement, but continued to have some nausea. Because of this an upper G.I. series was obtained and was within normal limits. Additional studies included: a skull series, tomograms of the adrenal gland areas for calcification and tuberculin skin testing which were all negative. She has continued to be followed at three-month intervals since discharge and maintained on Prednisone 5 mg a.m. and 2.5 mg. p.m. Fludrocortisone Acetate (Florinef) had to be added at three months in small dosage (.025-.05 mg) in order to maintain her blood pressure at desirable levels.

Discussion

Guleke[8] in 1911 demonstrated an interrelationship between the adrenal glands and calcium metabolism by showing that adrenalectomy ameliorated tetany in parathyroidectomized animals. Hypercalcemia was later reported following adrenalectomy in rabbits[8] and subsequently in dogs[9] and patients with adrenal insufficiency.[1] Despite several well documented cases in the literature, adrenal insufficiency is rarely included in the differential diagnosis of hypercalcemia and the association is not mentioned in several of the most authoritative textbooks of medicine. As Pedersen[5] stated, the clinical presentation of hypercalcemia and adrenal insufficiency may be quite similar. Others[2] have commented on adrenocortical insufficiency closely resembling hyperparathyroidism.

Although hyponatremia and hyperkalemia are traditionally considered to be the most consistent disturbances in serum electrolytes there are instances when hypercalcemia may be the only abnormality. More recently serum potassium and chloride have been found to be less sensitive indicators of adrenocortical function than sodium and calcium. The frequency of hyponatremia is almost identical to that of hypercalcemia if the latter is routinely checked.[2]

The exact mechanism for the hypercalcemia in adrenal insufficiency apparently is still unknown. However, there seems to be no disagreement that it is secondary to a deficiency in corticosteroid secretion. A number of hypotheses have been proposed and these have been thoroughly discussed by Walser et al.[8] It has been known for years that cortisone inhibits the active transport of calcium by the gastrointestinal tract.[10] Adrenalectomized rats have been found to be equally hypercalcemic regardless of calcium intake so this does not lend support to this theory.[11] Hyperproteinemia in association with hemoconcentration has resulted in an increase in protein bound calcium in adrenalectomized dogs. In addition to this, an increased affinity of plasma protein for serum calcium was demonstrated. The concentration of free calcium has been found to be normal, whereas, there was an increase in filterable calcium complexes.[8] Several observations point towards a deficiency, or excess of corticosteroids, as an important factor in the renal tubular handling of calcium and changes in the total extracellular fluid volume. An increase in extracellular fluid would decrease proximal tubular reabsorption of sodium and calcium and enhance delivery to the distal tubules. At this site the corticosteroids may promote sodium reabsorption without a direct effect on calcium transport. Walser et al[8] have demonstrated tubular reabsorption of calcium to be excessive in adrenalectomized dogs.

Plasma renin activity is also increased in patients with adrenocortical insufficiency and in addition to this it has been observed that angiotensin decreases renal calcium excretion and thus results in increased calcium levels.[12] Although the exact mechanism of the hypercalcemia is still unknown increased renal tubular reabsorption would seem to be of some importance.

Garcia-Webb and Briggs[3] have more recently proposed that plasma calcium rises in patients with adrenocortical insufficiency due to excessive production of 1,25-dihydroxycalciferol the active vitamin-D metabolite. They further propose that this could be due to depression of hepatic calciferol-25-hydroxylase. Avioli et al[13] have shown that this enzyme is inhibited by corticosteroids. Thus, a sudden reduction in adrenocortical secretion of cortisol may lead to excessive formation of 25-hydroxycalciferol, which is then converted to the active metabolite by a renal enzyme. Unfortunately, accurate assay methods for the de-

tection of this compound are in the experimental stage.

The problem of hypoglycemia in adrenocortical insufficiency is somewhat easier to explain. The glucocorticoids have many actions which affect enzyme synthesis, inflammatory processes, maintenance of water balance, blood cells, the gastrointestinal tract and central nervous system to name a few. In emergency situations epinephrine and glucocorticoids generally provide for the maintenance of adequate circulating glucose. Glucocorticoids have at least a threefold effect on elevating glucose levels: (1) inhibition of peripheral tissue protein synthesis, (2) increased metabolism of fats (stimulation of lipase enzyme) and most of all (3) the stimulation of hepatic gluconegenesis. A lack of these effects could obviously result in hypoglycemia.

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This Journal feature will be presented alternately by the University of Louisville and the University of Kentucky Departments of Medicine and Departments of Surgery. We hope to have these features revolve around subjects of immediate practical interest to the practicing physician; and, for those of us not able to attend grand rounds in the teaching centers as often as we might, we hope this will represent a bit of a refresher course.

Evaluation and Management of the Neonate With Ambiguous Genitalia*

Introduction

THE assignment of gender to an infant at the time of birth is usually quite a simple process based on a quick examination of the external genitalia. When a child is born with ambiguous genitalia, however, this assignment is often approached with considerable confusion and embarrassment on the part of the attending physicians and shame or guilt on the part of the parents. These children pose a tremendous diagnostic and therapeutic challenge to pediatricians and surgeons. The exact nature of the defect must be determined quickly so that a definite plan of management can be presented to parents to allow them to rear the child in a socially acceptable role. Although many birth defects pose a real threat to life if left uncorrected, the problem of ambiguous genitalia, if poorly or incorrectly handled, can lead to lifetimes of unhappiness for both parent and child. Therefore, the evaluation of these defects must be attended to with the same dispatch as any life-threatening anomaly. Parents should not be forced to take a child home from the hospital before a definite plan of management, as well as gender assignment, has been firmly decided. Moreover, it is imperative that these children be evaluated at facilities where physicians and surgeons are well versed in these problems.

Advances in the fields of cytogenetics, biochemistry and experimental embryology, as well as newer surgical diagnostic and reconstructive techniques, fortunately make it possible to complete these evaluations in the neonatal period. Worse than delay in making a gender assignment is assignment of the wrong gender. Experience tells us that gender is a learned role and is firmly entrenched by the age of 18 months to 2 years. A change after this time is fraught with emotional trauma and often social disaster. This is emphasized by the female with virilizing adrenogenital syndrome who is reared as a male, only to have the onset of normal menses at puberty heralded by hematuria and find out that he (she) is a perfectly normal female.

The existing anatomy and not the genetic sex is the prime determinant of gender assignment. Although it is quite a simple matter to reconstruct a set of functional female genitalia for satisfactory sexual performance, it is impossible to reconstruct a satisfactory penis. The majority of these children, therefore, should be assigned female gender and reconstructed accordingly. The rare exception is the male with severe perineal hypospadias. This report reviews briefly the embryology of sexual differentiation, the diagnosis of the various genetic abnormalities that give rise to ambiguity, and appropriate and necessary surgical reconstructive techniques with illustrative cases. The author wishes to acknowledge liberal reliance upon two recent excellent monographs on this subject by Hendren and Crawford[1] and Federman.[2] The surgical reconstructive techniques utilized are essentially those described by Hendren and Crawford.

Embryology of Sexual Development

The developmental embryology of sexual differentiation is a three-staged process (Fig. 1).

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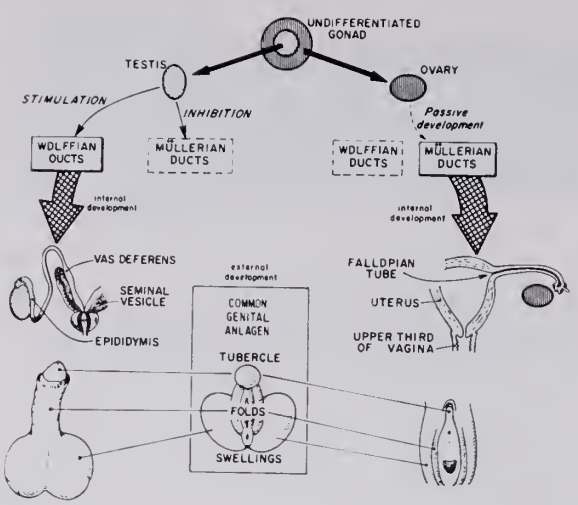


FIG. 1. Normal sexual differentiation (after Federman, copyright W. B. Saunders Co., 1968).

The early human embryo, whether genetically destined to be male or female, has all the internal and external anlagen for differentiation into either male or female structures. The first phase of sexual development involves the differentiation of either an ovary or testis from an undifferentiated gonadal primordium; this is determined by chromosomal sex. Thus, in the normal male embryo, the primordial germ cells migrate to the medulla of the undifferentiated gonad, with the cortex undergoing regression. This later develops into a normal testis (Fig. 1). In the female embryo, the germ cells migrate to the cortex of the undifferentiated gonadal primordium, which then becomes an ovary, with regression of the medullary structures. This completes Phase I. From that time on, very different events occur in the development of male and female genital structures. The internal genital organs come from two distinct and separate embryologic anlagen, the male wolffian ductal system and the female muellerian system, whereas the external genitalia differentiate into various end organs from a common set of embryologic anlagen.

If the undifferentiated gonad becomes testis, there is then active inhibition of muellerian structures by a locally produced testicular muellerian inhibitor substance. Further, there is stimulation by androgen of the wolffian ducts to become vasa deferentia, seminal vesicles and epididymides. Simultaneously, the external genital anlagen differentiate into penis and scrotum, also under the influence of androgen. Thus, there are two substances which are very important to the development of "maleness." If an ovary persists, the wolffian structures fail to develop and the muellerian internal structures develop into fallopian tubes, uterus, cervix and the upper one-third of the vagina. The lower two-thirds of the vagina develops from the common external anlagen; its vestige in the male is the prostatic utricle. The remainder of the female external genital development from the common anlagen also takes place at this time, but is not under the influence of estrogen or any other hormones.

Jost's classic experiments involving gonadectomy of developing normal male and female rabbit embryos at various times during embryogenesis did much to clarify our understanding of sexual development.[3] He showed clearly that the development along male lines is an active process dependent on two substances: active inhibition of female muellerian structures by the testicular inhibiting substance (only recently isolated), and development of wolffian structures and external male differentiation dependent on testosterone. By contrast, development of "femaleness" is completely passive and does not require the influence of estrogen for either internal or external differentiation. For example, a gonadectomized embryo, whether genetically determined to be male or female, always develops with a complete set of internal and external normal female genitalia. A gonadectomized male embryo given androgen shows both male and female internal structures because of the lack of testicular inhibiting substance and also has normal male external genitalia because of the presence of the androgen. Thus, the development of female genital structures takes place because of the absence of testicular influence and not by any active developmental process inherent in the female gonad. This data, along with recent advances in biochemistry and cytogenetics, have given us a clear understanding of the embryogenesis of many cases of ambiguous genitalia.

Diagnosis

Using Federman's classification, the four conditions causing ambiguous genitalia in the newborn arise from essentially two basic disorders: 1) disorders of gonadogenesis, which include true hermaphroditism, mixed gonadal dysgenesis and male pseudohermaphroditism, or 2) disorders of endocrinology which include female pseudohermaphroditism, caused either by congenital adrenal hyperplasia or the maternal ingestion of androgenic drugs. Although all of these syn-

dromes tend to produce varying degrees of virilization of a female external phenotype, thorough investigation of these infants for precise diagnosis of the abnormality and for delineation of the existing anatomy is imperative for proper genetic counseling and surgical reconstruction. Proper diagnosis and evaluation involve a thorough history, a careful physical examination, sex chromatin determination, chromosomal analysis, thorough x-ray examination, biochemical testing, endoscopy and occasionally laparotomy and gonad biopsy.

A thorough history must determine the presence of material ingestion of potentially androgenic substances during the pregnancy. Such agents as progestational hormones for habitual aborters are the most frequent offenders. History of similar occurrences in family members or of siblings who have died early in infancy because of excessive salt loss are also important in the family history. The occurrence in maternal aunts of an inguinal hernia containing a gonad is noteworthy as well as the occurrence in other children of amenorrhea at the time of puberty.

Physical examination of the external genitalia is extremely important. The size of the phallic structure is probably the most important determinant of later reconstructive efforts. Other important aspects are the degree of labioscrotal fusion, scrotalization of the labia, the presence or absence of gonads in the labia, the position of the single perineal orifice and the palpation of internal female structures by a rectal examination. What at first glance appears to be a male child with hypospadias and bilaterally undescended testes is quite often a complex intersex anomaly. In an apparently female child, the presence of inguinal hernias containing gonads in the labia should raise the suspicion of testes or ovo-testes.

Nuclear chromatin study, a relatively simple test from a buccal smear, is often very useful. This test is not valid before 24-48 hours after birth, when female children typically have greater than 20% barr body-positive cells, and male children have fewer than 1-2% positive.

Cytogenetic studies recently have offered the most precise differentiation of the disorders of gonadogenesis and readily explain some of the more interesting intersex anomalies. Standard texts of genetics explain in detail normal and pathologic aspects of both miosis and mitosis that are responsible for the usual chromosomal aberrations and mosaicism found in such orders as hermaphroditism and mixed gonadal dysgenesis. Determination of the total number of chromosomes and the number and type of sex chromosomes should be performed routinely.

Proper x-ray examination of the genitourinary tract is essential for exact anatomic delineation of these anomalies. We have found that conventional cystourethrography often may be very misleading in determining the presence or absence of a vagina coming off the normal urethral passage. Accordingly, we prefer to use a "flush genitogram" which is performed by taking a blunt-tipped syringe and placing it over the single perineal opening. Then dye is flushed retrograde, which will usually disclose a normal urethra and the presence of a vaginal cavity coming off the urethra just inside the perineal opening. However, a negative x-ray examination should never be taken as solid evidence against the presence of a vagina and other internal muellerian structures.

Biochemical tests of both urine and plasma have pinpointed very precisely some of the increasingly complex disorders of steroid synthesis. These metabolic derangements—all under the heading of congenital adrenal hyperplasia—depend on specific enzyme blocks in steroid synthesis and result in excessive potentially androgenic substances. The reader is referred to standard textbooks of endocrinology for more detailed discussion; suffice it to say that most of these cause elevation of urinary 17-ketosteroids and the salt losing and non-salt losing varieties of these syndromes must be distinguished in the neonatal period. Specific delineation of the enzyme block in congenital adrenal hyperplasia has little to do with assignment of gender early in the newborn and certainly must not delay the proper counseling and evaluation with the parent. These determinations do play a great role in later endocrinologic management.

The use of the Storz miniature fiberoptic endoscopes for cystoscopy has been a major breakthrough in the diagnosis and treatment of a large variety of genitourinary conditions in the neonate. We routinely endoscope all of these children in the neonatal period. By endoscopy along with proper x-ray studies and use of the infant laparoscope, we can ascertain internal and external genital anatomy and thereby carefully plan reconstruction. Via the single perineal opening, one can easily visualize the internal anatomy. The urethra and bladder as well as the usual position of the vaginal opening exiting from the urethra

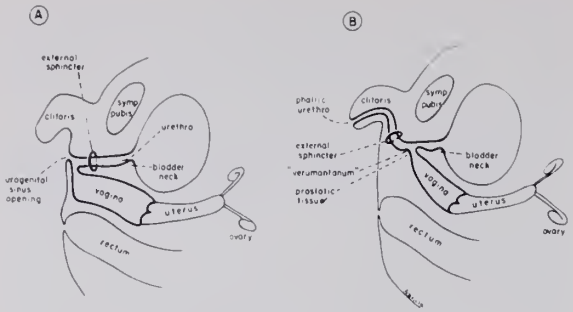


FIG. 2. Anatomy of adrenogenital syndrome (after Hendren, copyright Year Book Medical Publishers, Inc., 1972).

A. Common form where vagina enters common urogenital sinus distal to the external sphincter. Reconstruction is by flap vaginoplasty.

B. Extreme virilized form where vagina enters proximal to external sphincter. Reconstruction requires "pull-through" vaginoplasty.

posteriorly are also readily seen. One can often endoscope this abnormal vaginal opening and determine the presence or absence of the cervix and the uterus at the end of the vagina. Of extreme importance here, especially in the adrenogenital syndrome, is the precise location of the vaginal opening in relation to the external urethral sphincter, which must be preserved in reconstructive efforts in order to maintain continence. When the vaginal opening is proximal to the sphincter, a much different and more extensive operative approach is required (Fig. 2).

Although still used, laparotomy and gonadal biopsy gradually are being replaced by use of the infant laparoscope. The quality of these endoscopes and their miniaturization make this an extremely safe and useful procedure. In certain cases, however, such as mixed gonadal dysgenesis, removal of the gonad at the time of definitive reconstruction at the age of two to three years is carried out via laparotomy.

Sample Cases and Reconstructive Techniques

Over the past 13 months at the Children's Hospital in Louisville, we have evaluated and treated 12 patients with ambiguous genitalia. These represent three of the four major causes of ambiguous genitalia, namely congenital adrenal hyperplasia (six patients), mixed gonadal dysgenesis (one patient) and male pseudohermaphroditism (two patients). In addition, there were two male patients with perineal hypospadias and one female with a cloacal deformity, all of whom were referred because of ambiguity. No cases of true hermaphroditism have been seen, and this condition will only be discussed briefly.

True Hermaphroditism

True hermaphroditism is rare and by definition is a disorder of gonadogenesis implying the presence of functioning testicular and ovarian tissue. These infants can present in a phenotypic spectrum from apparent normal male to apparent normal female. Most appear as poorly virilized males with hypospadias and are often reared as such. Internal muellerian structures consisting of a uterus and a rudimentary vagina that connects to the male urethra are usually present. Most develop gynecomastia, and menstruation at puberty is common. The key to diagnosis here is suspicion. Further evaluation yields a positive sex chromatin in the majority of cases and usually a 46 XX chromosome pattern or more rarely a mosaic pattern of 46 XX/XY. On laparotomy both sets of genital structures and both types of gonadal tissue are found. Reconstruction which often occurs unfortunately late is generally towards masculinization if the phallus is of adequate size, with repair of hypospadias and the removal of the ovaries, tubes, uterus, and vaginal remnant. If diagnosed early, this is best performed at the age of two to three years. More often these children represent the social tragedies that are not discovered until puberty.

Congenital Adrenal Hyperplasia

The most common cause of ambiguous genitalia is congenital adrenal hyperplasia in the female patient. This is also commonly called adrenogenital syndrome or female pseudohermaphroditism. These genotypically normal female children present with extreme virilization in the newborn, resulting in ambiguity. Frequently, there is history of similarly affected children within the family or, in instances of non-adrenal female pseudohermaphroditism, of maternal drug congestion. Physical examination reveals a large phallus with a single perineal opening usually at its base, scrotalized labia with no gonads present, and an easily palpable set of normal female internal structures on rectal examination. The buccal smear is always chromatin positive and cytogenetic studies disclose a normal female 46 XX chromosome pattern. These findings are the results of excess androgens, either extrinsically or intrinsically because of one of the five metabolic blocks in normal adrenal steroid synthesis. The normal biofeedback mechanism for the adrenal is not effective and the adrenal undergoes hy-

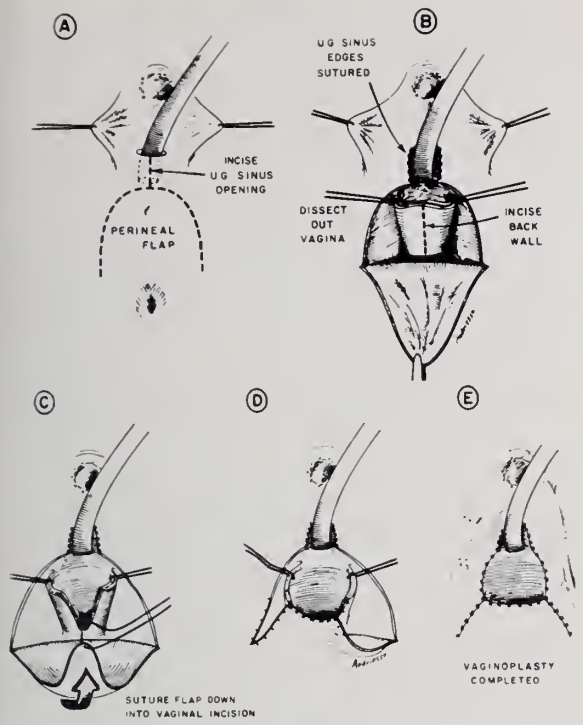


FIG. 3. Flap vaginoplasty (after Hendren, copyright Year Book Medical Publishers, Inc., 1972). Inverted U-shaped flap is raised to expose normal vagina, which is then brought down to the perineum to fashion a normal vaginal introitus.

perplasia producing more and more of the abnormal androgenic hormone substances, with resultant virilization during development of the external genitalia. Biochemical tests demonstrate excess urinary 17-ketosteroids. Of extreme importance in this group is determination of the salt losing type, which can present in infancy with extreme dehydration from vomiting and the typical findings of hyponatremia and hyperkalemia. Obviously, urgent supportive care is needed to correct these metabolic defects before any consideration of the underlying anatomy is undertaken. These infants should be reared female and will have normal fertility and the ability to bear children. Proper reconstruction towards this end requires precise anatomic diagnosis by x-ray examination and endoscopy. Laparotomy is not necessary. Once precise delineation of the anatomy is achieved, the parents are counseled and a plan for reconstruction at age two to three years is made. The most common anatomic finding is the vagina and urethra opening jointly through a common urogenital sinus into the perineum (Fig. 2A). Repair involves an inverted flap-type vaginoplasty in which the single perineal opening is incised posteriorly and an inverted U-shaped flap is raised and sutured to the vagina which lies just behind the perineum. This allows for reconstruction of a normal-appearing female perineum (Fig. 3). The treatment of the enlarged clitoris in the past has been by clitorectomy. Recently a technique for preserving and reducing the clitoris behind the pubic ramus has been described; this technique allows for a completely normal cosmetic appearance of the female perineum and the preservation of this very important sexual organ (Fig. 4). All of this reconstruction is performed at the age of two to three years.

When the anatomy is as shown in Figure 2b, however, a different form of repair is required, namely a pull-through vaginoplasty to preserve the external urethral sphincter. This procedure is carried out at the same time as a clitoral reduction (Fig. 5).

Case #1: The ambiguous genitalia in this neonate consisted of a large phallus, scrotalized labia and a single perineal opening. Appropriate studies disclosed congenital adrenal hyperplasia of the non-salt losing variety, and anatomic investigation showed the common type of anatomy (Fig. 2A). Appropriate steroid suppression was instituted, and the parents were counseled about reconstruction at about the age of two years. The child failed to return to clinic until age 6 years, having been ex-

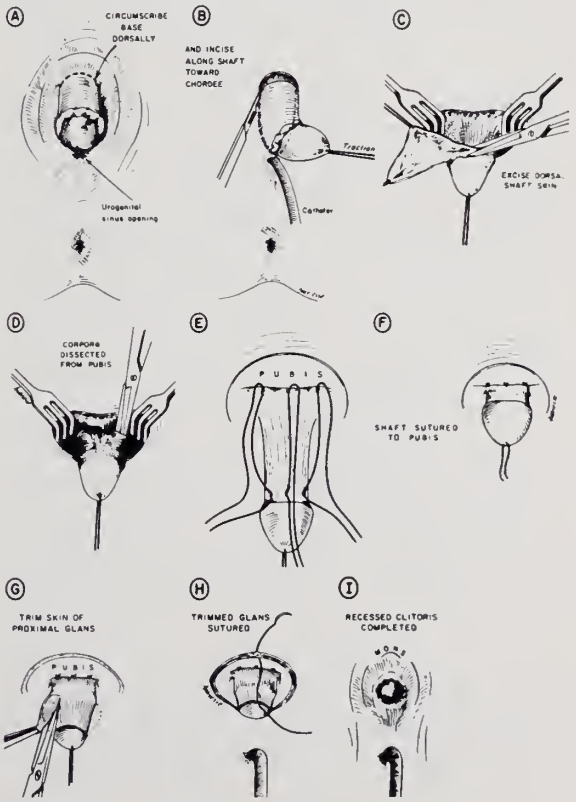


FIG. 4. Clitoral reduction (after Hendren, copyright Year Book Medical Publishers, Inc., 1972). The clitoris is reduced beneath the pubic arch such that only the tip of the glans presents at the skin level.

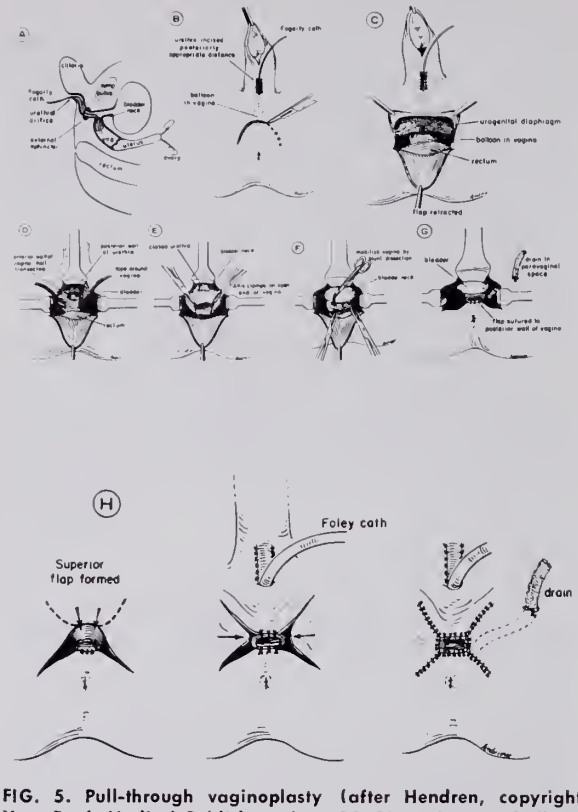


FIG. 5. Pull-through vaginoplasty (after Hendren, copyright Year Book Medical Publishers, Inc., 1972). A Fogarty balloon catheter is passed into the vaginal fistula via the cystoscope. A U-shaped flap is then raised in the perineum, and, by dissection in the perineum, the vaginal fistula is located, taken off the urethra and brought down to the perineum.

tremely virilized as a result of failure to take steroid medication. Her appearance at this age is shown in Figure 6. Steroid therapy was resumed and re-evaluation of anatomy was undertaken. At endoscopy the vagina was found to take off from the common urogenital sinus distal to the external urethral sphincter. Subsequently, she underwent a successful clitoral reduction and flap vaginoplasty (Fig. 7). Daily vaginal dilatations are necessary for six months to one year after operation to keep the healing suture line supple during growth. In our experience, such a procedure at the age of six to seven years is fraught with obvious psychologic difficulties.

Case #2: This infant was born to a family with one previous male child known to have congenital adrenal hyperplasia. Virilization at birth suggested adrenogenital syndrome, which was proved to be of the salt losing variety. The genitalia was similar to that of Case 1, but there was minimal scrotalization of the labia, a very enlarged phallus and a single perineal opening. Roentgen examination and endoscopy showed the less common type of anatomic adrenogenital syndrome with an extremely virilized male type urethra with the vagina coming off where a normal male veru montanum should be (Figs. 2B, 8). These infants often have a small remnant of prostatic tissue at this site. Proper reconstruction involves pull-through vaginoplasty at the age of two years (Fig 5).

Mixed Gonadal Dysgenesis

Mixed gonadal dysgenesis is the next most common cause of ambiguous genitalia and is characterized by a clinical picture not dissimilar from congenital adrenal hyperplasia with an enlarged clitoris and scrotalized labia. Family history is usually negative, and the parents need not be concerned about the recurrence of this abnormality in later children. In addition to the above structures, a rudimentary uterus is often found on physical examination. Essential to this diagnosis is the finding of a common urogenital sinus with both vagina and urethra on x-ray examination and endoscopy, and the presence of 46 XO/XY mosaicism on chromosome analysis. This is readily explained at laparotomy by the presence of a testis or ovo-testis on one side and a streak ovary on the other side. These children also have a rudimentary uterus and cervix at the end of a normal vaginal vault. Female gender is assigned at birth and reconstruction carried out at the age of two years. During this procedure, the gonads are removed by laparotomy because of the increased incidence of malignancy in these dysgenic organs and to prevent further virilization at the time of puberty. A flap-type



FIG. 6. Case 1. Adrenogenital syndrome at six years; note extreme virilization.

vaginoplasty and clitoral reduction are used in reconstruction.

Case #3: A newborn infant was referred to our institution for evaluation of an enlarged phallus and a single perineal opening. Maternal and family history were negative. Scrotalized labia not containing gonads were also present. Chromosome studies done in the neonatal period disclosed a 46 XO/XY chromosome mosaicism. X-ray studies showed a common urogenital sinus with both vagina and urethra just behind the single perineal opening. The parents were informed the child would be infertile but would be reconstructed as a female capable of a normal social role and sexual performance. At two years of age, a flap-type vaginoplasty and clitoral reduction were performed without difficulty.

Male Pseudohermaphroditism

Male pseudohermaphroditism occurs in both familial and non-familial or dysgenetic types. The most common of the familial type is testicular feminization syndrome, a sex-linked recessive trait, which unfortunately goes unrecognized usually until puberty. These children appear as perfectly normal phenotypic female neonates, with rarely any virilization or ambiguity. Attention is occasionally sought in the newborn period if the



FIG. 7. Case 1. Adrenogenital syndrome after clitoral reduction and flap vaginoplasty.



FIG. 8. Case 2. Adrenogenital syndrome genitogram. Note high vaginal fistula proximal to external sphincter.

child develops an inguinal hernia found to contain a testis at the time of repair. During adolescence, however, these children frequently seek attention because of amenorrhea. They are genotypically normal male individuals with a normal 46 XY chromosome pattern and no internal muellerian structures. They are infertile and have androgen-producing testes. This syndrome occurs because of peculiar androgen unresponsiveness of the external genital anlagen which therefore passively develops into female structures. Because of the muellerian inhibitor substance from the normal testis, there are no internal female structures but only the lower two-thirds of the vagina. When discovered, gonadectomy is advised, and they are continued in their female roles.

Dysgenetic male pseudohermaphroditism includes an ill-defined group of children with what appears to be androgen subresponsiveness in some; in others etiology is completely unclear. A variety of chromosomal mosaic patterns are found in these children as well as the normal 46 XY pattern. Most such individuals are chromatin negative. The majority do present, however, with true ambiguity at birth, with an enlarged phallus and a rudimentary vagina behind a common perineal opening. Reconstruction is towards the female gender and the dysgenetic gonads, usually ovo-testes or testes, are removed. In the neonatal period, these children may also present with hernias in which an abnormal gonad is found.

Case #4: This infant was referred to Children's Hospital shortly after birth because of an enlarged phallus and the presence of bilateral labial masses. Physical examination disclosed an enlarged clitoris with a single opening at its base. Two mobile masses were present in the minimally scrotalized labia. X-ray examination and endoscopy showed a normal urethra and a small vaginal remnant off the urethra just inside the perineal orifice. There was no evidence of uterus, fallopian tubes or

cervix. Chromatin study was negative and chromosome analysis showed a normal male type 46 XY pattern. Because of the inadequate phallic size, reconstruction towards the female gender was decided upon, and the parents were counseled regarding the problems of reconstruction and infertility. At the age of two years, a standard flap-type of vaginoplasty and clitoral reduction were performed.

Severe male hypospadias, which in itself can be regarded as a failure of full virilization, may also present with apparent ambiguity, especially if associated with bilateral cryptorchidism (Fig. 9). The primary differentiating features which determine male reconstructive efforts are adequate penile length despite severe ventral curvature (chordee), the meatus placed at the base of the penis, normal testes, normal 46 XY chromosomes and a normal male urethra with no vaginal remnant. A variety of excellent methods for correcting hypospadias and chordee are currently available.



FIG. 9. Severe male hypospadias. Note similarity to ambiguous genitalia.

Summary and Conclusions

Gender assignment is a neonatal surgical emergency and must not be delayed until the child is older. Gender roles are learned: an infant can be satisfactorily raised as male or female regardless of genetic sex. Change of gender after two years, however, often results in social disaster. These children need complete diagnostic evaluation in the neonatal period at facilities where physicians and surgeons are well versed in the necessary sophisticated laboratory and reconstructive techniques.

In determining the type of surgical reconstruction, existing anatomy and not genetic sex is the most important consideration. It is quite feasible to fashion a perfectly functional set of female genitalia but impossible to make a functional male phallus. Proper and thoughtful discussion and parental counseling in the newborn period can avoid a life of unhappiness for the vast majority of these children.

TIMOTHY G. CANTY, M.D.

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EDITORIAL

CME

THE KMA's action requiring continuing medical education for relicensure has brought about subtle and unexpected changes in the quality of such education and the responsibilities for the quality. Probably the majority of doctors were exposing themselves to 50 hours a year of such programs. When the programs were good the student would congratulate himself on his good luck to have gained some knowledge and inspiration. When they were not helpful to him, which was the case in too large a proportion of programs, he'd shrug it off as winning a few and losing too many.

Now that the student's ticket to life—his livelihood, his pleasure in the practice of his art and science, his children's rearing and education—his license, requires 50 hours of certified good programs of medical education, the responsibility for excellent quality shifts from the student to the program director. The student now has the right to expect a program labeled "for family practitioners," "for neurosurgeons," "for cardiologists" to give him real, understandable information. He has the right to finish the program without frustration, boredom and resentment of time poorly spent.

The Universities of Louisville and Kentucky, among many others, are happily rising to the occasion.

The Louisville Area Continuing Medical Education Consortium, despite the oversight that the initials don't spell anything, has done a brilliant job even in its first year after a huge effort in a short period of time by the organizers. Over nine months from September through May, monthly programs of two, four or five and a half hours duration—excellent programs of general, timely interest—are conducted by competent resident teachers working with beautifully qualified guest teachers from over the country—such subjects as "Electrolyte and Fluid Problems" and "Immunology and Malignant Disease" are illustrative.

The Consortium is a cooperative venture involving the private hospitals in the Louisville-Jefferson County area, the Jefferson County Medical Society and the University of Louisville. The concept is based on the belief that through an integrated and cooperative program a coordinated plan can be developed that will be **responsive to physician and hospital needs.**

The University of Kentucky has been more actively engaged in CME for several years in the form of one to five day postgraduate courses of the conventional lecture type. Now comes the announcement of an ingenious three and a half day program presented at U.K. by AMA's Council on Scientific Assembly in cooperation with the Universities of Kentucky, Louisville and Cincinnati and the Kentucky Medical Association. Seven three-hour programs are selected from 19 subjects of such detailed and specialized scope that the quality delivered by two to six faculty for each program can be anticipated excellent.

The fee for the Louisville program is $120 which comes to less than $5 an hour. The charge at U.K. is $30 to $40 for each three-hour program, somewhat more than $10 an hour.

AEO

Children's Rights Against Abuse and Neglect

IT is most important that a society capable of achieving such feats in the past decade of placing men on the moon and of transplanting hearts has finally addressed itself to the problem of securing the rights of children against neglect and abuse. Our greater interest in the welfare of animals is confirmed by earlier legislation to prevent cruelty to animals.

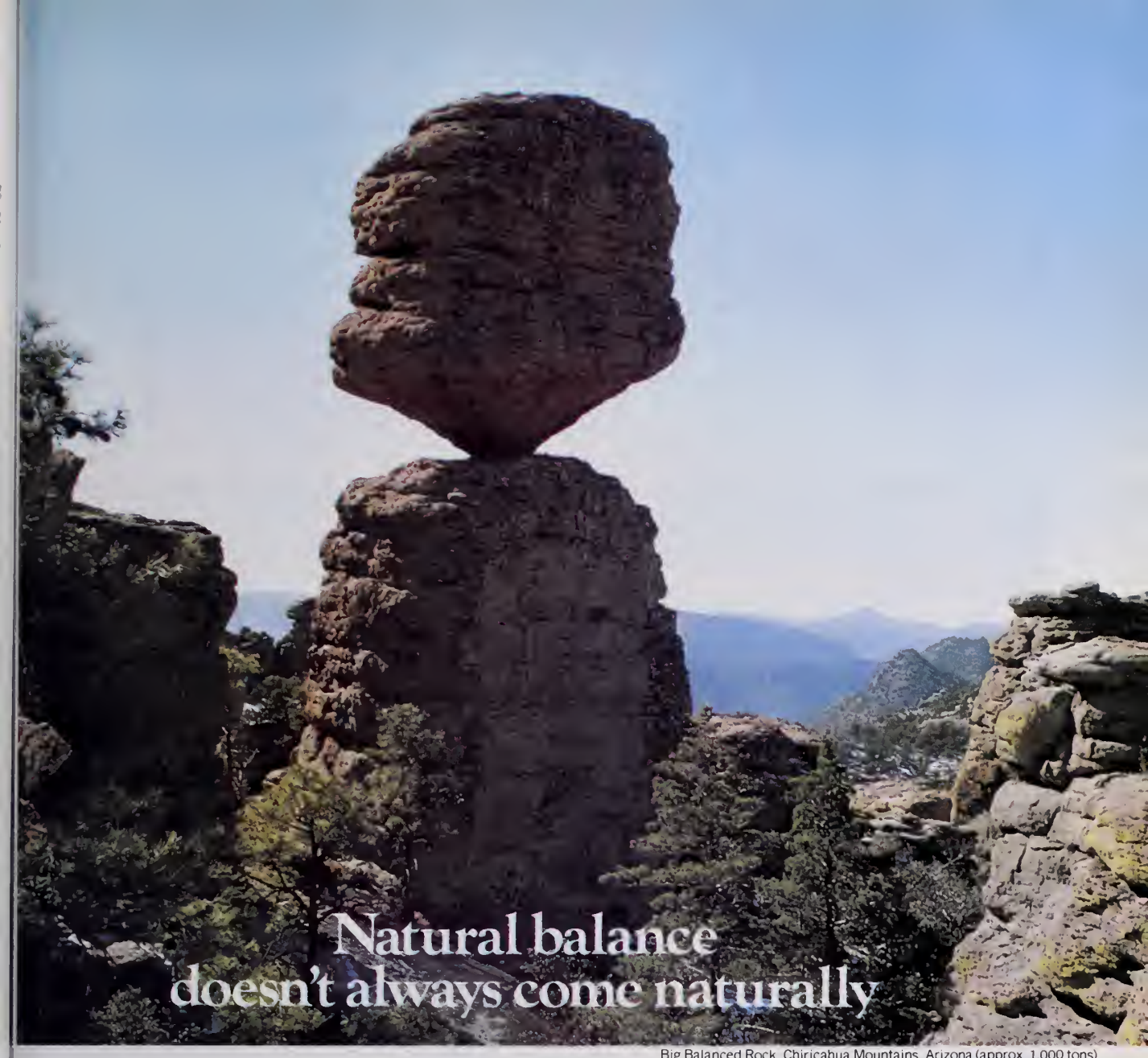
What are children for? Why do we have children? The concepts that "we live eternally through our children" and that "all life and the very sense of life is to pave ways for the firmer footing of those who succeed us" should be force enough to assure our full attention to the physical, emotional, educational and spiritual needs of children during all stages of their development. However, as a society, how long will it take it to overcome the philosophy of "spare the rod and spoil the child" and the belief that children are chattel; and how long to overcome our own training and background in child rearing. Undoubtedly, better health and care exists in this century than in the last or throughout recorded history, but numerous articles point to large numbers of infants and children who suffer serious physical and psychological damage from parents and others. As a result of recognition of this problem by physicians, nurses, social workers, educators, policemen, lawyers, concerned parents and other citizens, eventually laws were passed in 50 states against Child Abuse. Our Commonwealth passed the Kentucky Revised Statutes Section 199.335 in 1964, with additions with successive legislatures. Nationally, The Child Abuse Prevention and Treatment Act as Public Law 93-247.S.1191 was passed January 31, 1974.

With the available information and necessary legal statutes we have exceeded our ability to cope with this emerging problem of child abuse and neglect currently recognized as, not only a leading cause of death, but of many yet to be told ills of society. Our Commonwealth Department of Human Resources and County Social Service Departments are taxed by increasing demand with insufficient funding, personnel and facilities to accomplish the needs. During the past few years, we have had programs in the Commonwealth for education of physicians, lawyers, social workers, educators, policemen and parents; also the public has been informed by the press and other media. As a result of the federal legislation and funding, we now have a Child Abuse (Parents And Children Together) Center at the Norton-Children's Hospital and await information in future issues of this *Journal* with regard to its activities and progress. Although there is much national and local interest in the problem at present, we should not allow funding for education, treatment and prevention of the problem to decrease in the near future, but rather should increase our efforts to secure further Commonwealth and local support to provide for the needs of children. We need to maximize the use of personnel and facilities currently available through better coordination and cooperation. Our full efforts should be mobilized toward developing and securing an effective system which will assure reporting by the professions, evaluate the incidence in areas throughout the Commonwealth, secure more experts for immediate investigation and treatment of children, parents and family, provide a court system capable of immediate and fair action for children and parents, secure and build facilities as are necessary for treatment and training, continue and expand all educational aspects of treatment and prevention of the problem, and strive for cooperation and interchange of the many disciplines involved.

The article by Mortimer J. Stamm, "Battered Children: Doctors, Parents and the Law" in this issue is appropriately timed for the readers of this *Journal.* It is an excellent resource to keep at hand for each physician who cares for children, who *must* recognize and *must* report child neglect and abuse. As with other medical problems, the responsibility of each physician is to prevent, to diagnose, to prognosticate and treat when and if necessary. We await valuable and necessary research in recognition of suspect parents, more effective treatment and methods of preventive education against "battered children"; hopefully, in the not too distant future.

Society is now aroused to the problem and should not be allowed to be quieted until the rights of our posterity, our children, are secured for "LIFE, LIBERTY AND THE PURSUIT OF HAPPINESS".

Billy F. Andrews, M.D., Professor and Chairman
Department of Pediatrics, University of Louisville School of Medicine



Big Balanced Rock, Chiricahua Mountains, Arizona (approx. 1,000 tons)

nd useful in the management of vertigo* associated with
es affecting the vestibular system.
ı relieve nausea and vomiting often associated with vertigo.*
ıal adult dosage for Antivert/25 for vertigo:* one tablet t.i.d.
ɔ available as Antivert (meclizine HCl) 12.5 mg. scored
s, for dosage convenience and flexibility.
ivert/25 (meclizine HCl) 25 mg. *Chewable* Tablets for
a, vomiting and dizziness associated with motion sickness.

UMMARY OF PRESCRIBING INFORMATION

ICATIONS. Based on a review of this drug by the National Academy of ces—National Research Council and/or other information, FDA has classified dications as follows:
ective: Management of nausea and vomiting and dizziness associated with on sickness.
sibly Effective: Management of vertigo associated with diseases affecting the ular system.
al classification of the less than effective indications requires further tigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

Antivert®/25
(meclizine HCl) 25 mg. Tablets
for vertigo*

VISUAL FOCUS ON ACUTE GOUTY ARTHRITIS



Foot of patient with acute gouty arthritis as seen by conventional x-ray.



Scintiphotogram of same foot reflects inflammatory process.

The scintiphotograph on the right shows increased uptake of radiotechnetium polyphosphate in the metatarsophalangeal joint and the proximal interphalangeal joint of the great toe of a patient with acute gou arthritis. This increased uptake probably results fro increased vascularity in the affected areas.

For a more detailed description of scintiphotography, see "addendum" at right.

THERAPEUTIC FOCUS ON

CAPSULES, 25 mg and 50 mg

INDOCIN®

(INDOMETHACIN | MSD)

helps relieve pain and other symptoms of inflammation in acute gouty arthritis in selected patients

INDOCIN is a potent drug with anti-inflammatory, antipyretic, and analgesic properties. It should not be used in conditions other than those recommended. Although INDOCIN does not alter the progressive course of the underlying disease, in selected patients with acute gouty arthritis it has been found highly effective in relieving pain and in reducing fever, swelling, and tenderness.

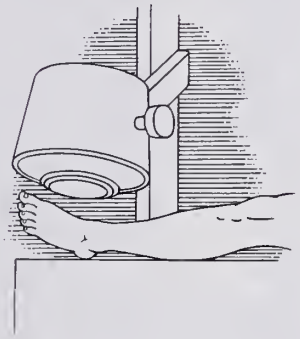
MSD
MERCK SHARP & DOHME

For a brief summary of prescribing information, please see following page.

addendum

MSD
MERCK SHARP & DOHME

Facts about Scintiphotography



In recent years a variety of radiopharmaceuticals have been employed to aid in the diagnosis of bone and joint disorders. The joint-imaging technique consists of injecting technetium polyphosphate intravenously, and imaging is performed with the scintillation camera two hours after the administration of the radionuclide. In general, for joint surveying, the shoulders, elbows, hands, wrists, knees, ankles, feet, and vertebral column are mapped. The entire scanning process takes approximately one hour. The criterion for a positive image is a higher concentration of radioactivity in a joint region than in adjacent nonarticular bone. In effect, each patient serves as his own control.

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(INDOMETHACIN | MSD)



helps relieve pain
and other symptoms
of inflammation
in acute
gouty arthritis
in selected patients

IMPORTANT NOTE: INDOCIN (Indomethacin, MSD) cannot be consider a simple analgesic and should not be used in conditions other than tho recommended. The drug should not be prescribed for children becau safe conditions for use have not been established.

Because of the high potency of the drug and the variability of its potent to cause adverse reactions, the following are strongly recommende 1) the lowest possible effective dose for the individual patient should prescribed. Increased dosage tends to increase adverse effects, part ularly in doses over 150-200 mg per day, without corresponding clini benefits; 2) careful instructions to, and observations of, the individu patient are essential to the prevention of serious and irreversible, cluding fatal, adverse reactions, especially in the aging patient.

Contraindications: Children 14 years of age and under; pregnant wom and nursing mothers; active gastrointestinal lesions or history of recurre gastrointestinal lesions; allergy to aspirin or indomethacin.

Warnings: *Gastrointestinal Effects:* Because of the occurrence and, times, severity of gastrointestinal reactions, be continuously alert for a sign or symptom signaling a possible gastrointestinal reaction. The ris of continuing therapy with INDOCIN in the face of such symptoms mu be weighed against the possible benefits to the individual patient. Gastr intestinal effects may be reduced by giving the drug immediately aft meals, with food, or with antacids. Use greater care in aging patients.

Ocular Effects: Corneal deposits and retinal disturbances, including tho of the macula, have been observed in some patients on prolonged therap Discontinue therapy if such changes are observed. Ophthalmologic exa ination at periodic intervals is desirable in patients on prolonged therap

Central Nervous System Effects: INDOCIN may aggravate psychiat disturbances, epilepsy, and parkinsonism, and should be used with co siderable caution in patients with these conditions. If severe CNS adver reactions develop, discontinue the drug.

Precautions: Blurred vision may be a significant symptom that warrants thorough ophthalmologic examination. Patients should be cautioned abo engaging in activities requiring mental alertness and motor coordinatio as driving a car. Headache which persists despite dosage reduction r quires complete cessation of the drug. May mask the usual signs a symptoms of infection; therefore, the physician must be continually the alert for this and should use the drug with extra care in the presen of existing controlled infection. After the acute phase of the disease under control, an attempt to reduce the daily dose should be made r peatedly until the patient is off entirely.

Adverse Reactions: *Gastrointestinal Reactions:* Single or multiple ulcer tions of the esophagus, stomach, duodenum, or small intestine, includi perforation and hemorrhage, with fatalities in some instances; rarely, inte tinal ulceration has been associated with stenosis and obstruction; gastr intestinal bleeding without obvious ulcer formation; perforation of pr existing sigmoid lesions (diverticulum, carcinoma, etc.); rarely, increas abdominal pain in ulcerative colitis patients or development of ulcerati colitis and regional ileitis; gastritis, which may persist after the cessatio of the drug; nausea, vomiting, anorexia, epigastric distress, abdomin pain, and diarrhea.

Eye Reactions: Corneal deposits and retinal disturbances, including tho of the macula, have been observed on prolonged therapy; blurring vision.

Hepatic Reactions: Rarely, toxic hepatitis and jaundice, including son fatal cases.

Hematologic Reactions: Aplastic anemia, hemolytic anemia, bone marro depression, agranulocytosis, leukopenia, and thrombocytopenic purpur Since some patients manifest anemia secondary to obvious or occult ga trointestinal bleeding, appropriate blood determinations are recommende

Hypersensitivity Reactions: Acute respiratory distress, including dyspn and asthma; angiitis; pruritus; urticaria; angioedema; skin rashes; purpur

Ear Reactions: Hearing disturbances, deafness, tinnitus.

Central Nervous System Reactions: Psychic disturbances including ps chotic episodes, depersonalization, depression, and mental confusio coma; convulsions; peripheral neuropathy; drowsiness; lightheadednes dizziness; syncope; headache.

Cardiovascular-Renal Reactions: Edema, elevation of blood pressur hematuria.

Dermatologic Reactions: Loss of hair, erythema nodosum.

Miscellaneous: Rarely, vaginal bleeding, hyperglycemia, glycosuria, ulce ative stomatitis, and epistaxis.

Note: In patients receiving probenecid, plasma levels of indomethacin a likely to be increased.

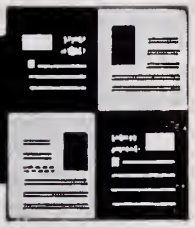
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SPECIAL ARTICLES



Battered Children: Doctors, Parents, and The Law

MORTIMER JEREMIAH STAMM, J.D.*

A discussion of legal and medical issues involved in a growing phenomenon which demands a serious cooperative effort between law and medicine to protect children and help abusive adults.[1]

Description and Significance of the Child Abuse Syndrome

WHEN we talk about child abuse and battered children, we are speaking of what has been called the biggest single cause of death of young children in America—even greater than well-recognized and thoroughly studied children's diseases.[2] The doctors who published their landmark article on child abuse in 1962 spoke of a "battered child syndrome" and said that it is a frequent cause of permanent injury or death which should be considered in any child exhibiting evidence of fracture of any bone, subdural hematoma, failure to thrive, soft tissue swellings or skin bruising, as well as in any child who dies suddenly, or where the degree and type of injury are at variance with the history regarding the occurrence of the trauma.[3] This essential definition was the product of nearly two decades of medical research made possible by the development of x-rays and the desire of pediatric radiologists to explain the occurrence of multiple skeletal fractures in small children. The authors of the article demonstrated the human causation of the "battered child syndrome," established the condition as a clinical diagnosis, and concluded that proper medical management required investigation by law enforcement officials to establish causes and provide protection.

A 1962 survey indicated that the battered child syndrome is routinely produced by an endless list of instruments and techniques adapted by adults to the brutalization of young children.[4] In 1962, both the definition of abuse and the reported examples were limited to those of physical abuse. By the 1970s, however, medical, legal and social experience had expanded the definition to include all intentional and unintentional physical or mental abuse suffered by a child at the hands of a disturbed parent, guardian or stranger.[5] The addition of mental abuse was a response to the reality of what was happening to the child's mind while its body was being subjected to physical abuse, as well as a recognition that a child can be significantly abused without ever touching its body. Mental abuse may now stand alone as a basis for legal action apart from any battering of the person of the child.[6]

There is a cultural tradition of violence toward children in western society which has roots reaching into such diverse historical soils as Roman law and the religious upheavals of the middle 16th century.[7] This attitude is currently reflected in nationwide surveys which indicate that an estimated 250,000 children annually receive treatment for child abuse.[8] Since many are not treated and, therefore, not counted, the number of abused children reported is probably much lower than the number of cases which actually occur. The gravity of the problem is made even more apparent by mortality and morbidity statistics which indicate that about 25% of reported cases result in death and another 25% in permanent brain damage. When these figures are compared with the mortality rate from childhood diseases such as measles or polio, the seriousness of the battered child syndrome becomes quite evident.[9]

Reported incidents of child abuse, like other statistics on deviant behavior, greatly overrepresent the economically disadvantaged class. This is so in spite of the fact that it is widely recognized that child abuse itself is not a class phenomenon, but rather a response to pervasive tensions in the nuclear family. Clinical descriptions of the phenomena of abuse generally center on the facts that while any child may be a target for abuse, most cases occur when the child is less than three years old. It is often the youngest of several children, but the six to eighteen month old seems to be particularly susceptible to abuse. There is a 50% chance that if the abusive situation is left unchecked, the child will be maimed or killed.[10]

The clinical profile of the abusive adult generally reveals a person unable to cope with personal character or psychological deficiencies or with an unstable and attenuated domestic situation. Such hallmarks of

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the profile obviously and unhesitatingly crisscross classlines and the adults possessing them may be masters at covering up these defects by various defensive behavioral strategies.[11] They may even suffer from what is called "guilt-pseudo amnesia," and deny the abuse, no matter how damaging or incriminating the evidence. This makes it difficult to get any information from them about the abuse of the child. Those who do admit what they have done are generally much more concerned with what will happen to them than with what will happen to the child.[12]

The Required Reporting of Child Abuse

All of these realities have prompted the passage of child abuse reporting statutes across the United States. Kentucky's law was first passed in 1964 and given its present form by amendments made during the 1972 General Assembly. The eight subsections of the law are found in KRS 199.335 and 199.990(7). It was believed that if certain people, especially doctors and those who come into most contact with children, such as nurses, teachers, social workers, school administrators, or maybe even all people, were required to report abuse or suspected abuse, then the problem of abuse would be diminished. This has not happened, however. Rather, we are now in the midst of a child abuse epidemic.

The American Journal of Psychiatry notes that physicians are reluctant to consider the diagnosis of parental abuse because it is personally abhorrent and threatens to burden them with the role of accuser. There is also a fear of retaliatory litigation and an overwhelming sense of futility about the ultimate management of such cases.[13] In addition, they often misplace their duty of confidentiality and extend it to parents instead of the child who is the patient.

The Journal of the American Medical Association further supports this by somewhat apologetically explaining that physicians have great difficulty both in believing that parents could have attacked their children and in undertaking the essential questioning of parents on this subject. Many are said to find it hard to believe anyone could have done such a thing and, therefore, wipe out suspicions that it occurred. It is, perhaps, easier to deny the abuse than to endure the anger aroused by its recognition. Furthermore, doctors aren't trained to be policemen or district attorneys.[14]

In a 1967 study of 450 doctors most likely to come into contact with abused children, it was found that one in four would not report a suspected case of child abuse syndrome. One in five said they rarely or never considered it when treating an injured child. Over fifty percent of the doctors did not know the correct reporting procedure to follow in their communities.[15] Whatever the reasons, and several have been suggested here, the effect is that a majority of battered children treated by doctors and hospitals are returned to their abusive custodians who, predictably, inflict further injury upon the children.

It has been suggested that only private damage actions against non-complying doctors and hospitals, tried before juries that impose costly penalties measured in tens and hundreds and thousands of dollars, will provide the encouragement to report and help make the child abuse reporting statutes serve the purpose they were intended to serve.[16] The thesis of this argument is predicated on the idea that money is a language which all professionals understand, and while that may be true, there is reason to suggest that some of the reluctance of both laymen and professionals to report abuse is also rooted in the lack of preventive and remedial services related to abuse.[17] The low priority status heretofore given to child abuse treatment and prevention programs by those holding the powers of appropriation and allocation of monies and social resources undermines both the child's well-being and the public's willingness to report.[18]

Personal reservations about the lack of services do not relieve anyone of the duty to report, however. The authors of the landmark article in 1962 observed that physicians have a duty and responsibility to the child to require a full evaluation of the problem and to see to it that no foreseeable repetition of the abuse is permitted to occur.[19] That exhortation has been repeated over the years.[20] Doctors who fail to diagnose or to report suspected abuse may find themselves involved in costly litigation that can be brought on a number of different theories which, if not now operative in Kentucky, may be so presently because of the increased attention being given to this area of law and children's rights.[21] The enactment in 1974 of federal Senate Bill S.1191, Public Law 93-247, The Child Abuse Prevention and Treatment Act, and the money made available through it, are bound to contribute to increased publicity on the problem of abuse.

The vulnerability of doctors to litigation is increased by the added fact that the child abuse or battered child syndrome has been so well described in medical literature that courts have even taken notice of the elements of the syndrome.[22] When abuse goes unreported, even though the doctor treats the child-patient, the child may be abused again if there is no reporting and subsequent judicial or social agency intervention to deal with the abusive adults. Abuse subsequent to such a failure to report may then be shown to be directly and proximately caused by the failure to report.

There is ample precedent for holding doctors liable for failing to report under reporting statutes, and, viewing the failure to report as proximate cause makes sense in a battered child case because of the repetitive nature of the abuse.[23] Knowledge by the doctor of the child abuse syndrome and of the habits of abusive adults should include knowledge that if abuse is not reported, the child may be killed.

The Operation of the Law

Under Kentucky law, the abusive parent violates at least KRS 405.020 (the parental responsibility statute), 208.020(3), (4), or (5) (the "contributing" laws), and 530.060 and 530.070 (the "endangering" and "unlawful transaction" laws relating to children), in addition to other sections of the Penal Code relating to the

offense against the child. The parent may also be liable to civil suit by the child under the rule of *Rigdon v Rigdon,* Ky., 465 S.W. 2d 921 (1970), which makes it possible for children to sue their living parents for torts against the children.

The abused child, or child suspected of being abused, will most generally be immediately handled by a juvenile court order of temporary custody entered by a judge pursuant to KRS 208.080(2). This will remove the child from the threatening situation pending the juvenile court investigation and hearing which follow the filing of the petition at the time the temporary custody order is obtained. Of course, a more immediate recourse in removing and providing protective custody for the child is that given to the social worker, law enforcement official, doctor and hospital under KRS 199.335(4). The judicial action disposing of that part of the case involving just the child will generally take place in juvenile court under the dependency and neglect jurisdiction of KRS 208.020 (1)(d). The juvenile court's dispositional powers are set forth in KRS 208.200 and augmented by KRS 208.280. These involve orders for public or private care and custody under the control of the court, or commitment to the state. Responsible adults may be held financially liable for this judicially ordered care of their children.

A foremost problem of litigating abuse cases is the absence of adequate legal counsel to represent the child. Even if attorneys are available, they will have a hard time finding any definite guidelines for abuse proceedings, in terms of decided Kentucky case law. There is a dearth of high court precedent due to the lack of appeals which results both from cases being settled out of court, through social worker intervention and counseling with the abusive adult, as well as the absence of lawyers representing children in cases which do go to court. The few Kentucky cases which do exist are not much help because they deal with procedural issues related to proceedings in which adults are prosecuted for contributing to the need, neglect, dependency or delinquency of children.[24]

If there is to be litigation, it may be under one or more provisions of Chapters 199, 208, or 530 of the Kentucky Revised Statutes. More commonly, an abuse case will be brought as a civil action, because legal proceedings involving abused children are frequently disguised as dependency, neglect, need or abandonment and brought under KRS 208.020(1)(d) in the juvenile court. In such cases, only the child is before the court and only the child can be reached by the court. There is no jury in such a proceeding and the civil evidentiary standard of "preponderance" prevails. Where abuse is found, parental rights to custody of the child may be suspended while the child is cared for by state or local social service agencies. In the really hopeless situation, proceedings may be instituted in circuit court to permanently terminate any rights to custody of the child which the parents may have. It may take a combination of civil action on behalf of the child and criminal action against the parents to remove the child from the abusive situation and order treatment or punishment for the parents.

The prosecutor or plaintiff's attorney will probably be hampered in meeting any burden of proof because of the secretive nature of child abuse. Abusive acts are usually committed within the privacy of the home, either unobserved or witnessed only by a spouse who may seek to refuse to testify against the abusing mate. This means that the attorney will probably have to build a case on circumstantial evidence, with the help of doctors, psychiatric staff, social workers and others who have something less than eyewitness information about the abuse. This, in turn, means dealing with hearsay evidence and problems with admissibility, relevancy, competency and materiality. The attorney will also be faced with the doctor as a primary, professional and expert witness, as well as the problem of whether the facts of the case lend themselves to more than one plausible interpretation.

Evidentiary Aspects of Child Abuse Cases

Since a lawyer's attempt to obtain irrefutable, direct evidence in abuse cases is seriously hampered by the lack of witnesses to the acts of abuse, he or she must generally rely on circumstantial evidence and build a case on the fact that parental explanations do not square with the medical findings. The theory of *res ipsa loquitur* will be considered and utilized in many cases. It provides the theoretical framework for a case built upon the fact that the defendant had control of all aspects of the situation which, in abuse cases, resulted in abuse of the child. However, when there are two plausible causes of the harm to the child and the defendant can only be responsible for one of them, *res ipsa loquitur* is of questionable or negligible utility. In many child abuse cases, the parental explanation of the injury is medically plausible and attributable to a cause other than their own actions. As far as the child is concerned, however, while circumstantial evidence and the theory of *res ipsa loquitur* may be useless in identifying the abusive parent, they may be used to find general parental negligence and permit the removal of the child from the home under KRS 199.335(5), 208.080(2), and 208.200(1).

A case built upon circumstantial evidence needs the full cooperation of the medical profession. The demonstrative evidence available in x-rays, photographs, slides and medical records, such as admission sheets, history sheets, physical exam sheets, vital signs sheets, lab reports, nurses' notes, social service notes and progress reports can be critically important in showing and proving the abuse syndrome. X-rays are very important in demonstrating the types of fractures and injuries to the child, and the use of organ charts and skeletal models can be very helpful in demonstrating the nature and extent of the injury.

The collection and preparation of this evidence begins with a suspicion of abuse by the nurse or attending physician. If there is suspicion, then an attempt should be made to document the syndrome. Professional or ethical laxity at this point—a reluctance to report—may result in no evidence for a trial, no help for the abusive parents, and, eventually, maybe even a dead child. Law and medicine are inextricably joined

from the very beginning. Good documentation and careful questioning of parents may elicit the information necessary for court action or therapeutic counselling, and it may also show the extent of the injuries to the child.

Perhaps more important than demonstrative evidence, however, is the testimony of witnesses who appear in court on behalf of the battered child. This may include a doctor, a social worker, relatives, neighbors, teachers and others. The preparation of these witnesses is very important, because the solution of the child abuse problem entails an essentially multidisciplinary approach which, if cooperatively presented to the court, can give collective strength to the case and place a great number of relevant facts before the judge. Special attention should be given to the doctor and the question of causality, as well as a delicate handling of the issue of confidentiality as it may relate to the social worker or other treatment professional who may have to work with the child or adult after court. While not always protected by a recognized privilege, such service professionals place a lot of stock in the confidential nature of client communications, and they are especially hesitant to compromise their confidentiality or their relationship with the client.[25]

A Note on the Criminal Prosecution of Abusive Adults

The reluctance of doctors and others to report abuse is matched by an equal reluctance by lawyers to criminally prosecute those who do the abusing. This is due to the same evidentiary problems pointed out above, plus the added complications of the element of intent and a higher standard of proof beyond a reasonable doubt. Thus, prosecutors are pragmatically reluctant to prosecute, even though prosecution is one way for the abusive adults to get the help or punishment provided for by Kentucky law.

When undertaken, however, and especially in the most extreme cases, such prosecutions may help reshape local and national attitudes toward child abuse and heighten the general social awareness of societal shortcomings which foster conditions giving rise to child abuse. It may also cause some re-thinking about the use of corporal punishment in raising and educating children.[26] The result of prosecution need not be punitive, and, indeed, most child abuse literature speaks against punitive measures being taken against the generally maladjusted adults involved. Courts and prosecutors usually follow this advice.

Conclusion

The causative factors in the formation of the abusive adult personality may generally be said to be grounded in social problems of enormous dimensions which will not be remedied in the foreseeable future. While child abuse has elements of both criminal and family law, we should use the punitive measures of the criminal law with reluctance and work on the family aspects of the problem with the hope of eradicating the pathology involved in the vicious cycle of successive generations of parents who abuse their children. The situation demands a conscientious and informed effort by medical and legal professionals, working together to address the child abuse problem in law and medical school lectures, hospitals, courtrooms and legislative chambers. If the collective strength of these voices is raised in the name of children, substantive results may hopefully be expected to begin to take form.

Footnotes

1. An excellent study of the entire subject of child abuse is found in Helfer & Kempe, eds., The Battered Child, University of Chicago Press, 1968 and Helfer & Kempe, eds., Helping the Battered Child and His Family, Lippincott, 1972. An extensive bibliography on this subject is also available upon request from the author of this article.
2. Cooksey, "The Battered Child—Louisiana's Response to the Cry," *Loyola Law Review* 17:372 (1970); Comment, The Child Abuse Problem in Iowa, *J of the Iowa Med. Soc.* 53:692 (1963); Kempe, Silverman, Steele, Droegemueller, and Silver, "The Battered Child Syndrome," *JAMA* 181:17 (1962).
3. Kempe, Silverman, Steele, Droegemueller, and Silver, "The Battered Child Syndrome," *JAMA* 181:17 (1962).
4. DeFrancis, "Child Abuse—Preview of a National Survey," Children's Division, American Humane Association, Denver (1963). Also see Note 2.
5. Comment, "The Abused: Problems and Proposals," *Duquesne Law Review* 8:136 (1970).
6. See KRS 199.335(2).
7. See Note 2.
8. Zalba, Battered Children, *Transaction* 8:58 (1971). Also see Note 5.
9. Grumet, The Plaintive Plaintiffs: Victims of the Battered Child Syndrome, *Family Law Quarterly* 4:296 (1970).
10. Cameron, Johnson, and Camps, "The Battered Child Syndrome," *Medicine, Science, and Law* 6:2 (1966); Galdston, "Observations on Children Who Have Been Physically Abused and Their Parents," *Amer. J. of Psych.* 122:440 (1965). Also see Note 3.
11. See Note 10.
12. Cameron, Johnson, and Camps, "The Battered Child Syndrome," *Medicine, Science, and Law* 6:2 (1966).
13. Galdston, "Observations on Children Who Have Been Physically Abused and Their Parents," *Amer. J. of Psych.* 122:440 (1965); Kohlman, Malpractice Liability for Failing to Report Child Abuse, *Calif. St. Bar J.* 49:118 (1974).
14. See Note 3.
15. Kohlman, Malpractice Liability for Failing to Report Child Abuse, *Calif. St. Bar J.* 49:118 (1974). In Kentucky, a doctor reports abuse or suspected abuse according to the provisions of KRS 199.335(3), which states that:

> An oral report shall be made immediately by telephone or otherwise to a representative of the department for human resources who shall inform the local law enforcement authority. As soon thereafter as possible a report in writing shall be made to the department for human resources for use in investigation and appropriate action to protect the child involved. Such reports shall contain the names and addresses of the child and his parents or other persons responsible for his care, if known, the child's age, the nature and extent of the child's injuries (including any evidence of previous injuries), or nature and extent of the child's malnutrition, sexual abuse or severe neglect, and any other information that the person believes might be helpful in establishing the causes of the injuries, malnutrition, or sexual abuse, or neglect and the identity of the perpetrator.

It is important to note that by reporting, the doctor does not become a party to any litigation, but only a probable witness in legal proceedings which are brought against the parents or on behalf of the child. It is only by failing to report that the doctor is put in jeopardy of becoming a party-defendant in a lawsuit.

16. Ramsey & Lawler, "The Battered Child Syndrome," *Pepperdine Law Review*, 1:372 (1974). Also see Note 3.
17. See Note 8. It may be fitting to add that under Kentucky law many more people than professionals are covered. The next door neighbor may also be vulnerable to significant civil litigation for failing to report abuse.

The responsibility to report does not belong to the medical profession alone. With respect to doctors, however, circumspection is the surest way to avoid liability.

18. See Note 9.

19. Ramsey & Lawler, "The Battered Child Syndrome," *Pepperdine Law Review*, 1:372 (1974). Also see Note 3.

20. E.g., Shaw, "The Surgeon and the Battered Child," *Surg. Gynec., and Obst.* 119:355 (1964); Britton, Cantor, Clark, Harpole, Bensel and Tubergen, "How Physicians Can Help Prevent Child Abuse," *Patient Care* 7:131 (1973); Holder, "Child Abuse and the Physician," *JAMA* 222:4 (1972): Schrotel, "Responsibilities of Physicians in Suspected Cases of Child Brutality, *Cincinnati J. of Medi.* 42:108 (1961); Harper, "The Physician, the Battered Child, and the Law," *Pedia.* 31:899 (1963); Friedman & Holter, "Principles of Management in Child Abuse Cases," *Amer. J. of Orthopsychiatry* 38:127 (1968).

21. See Notes 15 and 19.

22. *People v. Jackson,* 18 Cal. App. 3rd 504, 95 Cal. Rptr. 919 (1971).

23. See Note 19

24. *McDonald v. Commonwealth,* Ky., 331 S.W. 2d 716 (1960), which dealt with the constitutionality of the contributing statute, and *Hall v. Commonwealth,* Ky., 402 S.W. 2d 701 (1966), which dealt with an adult's right to a jury trial in a contributing case.

25. Brown, Fox, and Hubbard, "Medical and Legal Aspects of the Battered Child Syndrome," *Chicago-Kent Law Review* 50:45 (1973); Plaine, "Evidentiary Problems in Criminal Child Abuse Prosecutions," *Georgetown Law Review* 63:257 (1974); McKenna, "A Case Study of Child Abuse: A Former Prosecutor's Views," *Amer. Criminal Law Review* 12:165 (1974). See also Notes 15 and 19.

26. McKenna, "A Case Study of Child Abuse: A Former Prosecutor's View," *Amer. Criminal Law Review* 12:165 (1974). The provisions of KRS 503.110 and 503.120 are examples of the status of this law in Kentucky. They set forth the conditions under which force may be legally and justifiably directed toward children, adults and incompetents.

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Warnings: Estrogen therapy should not be given to women with recurrent chronic mastitis or abnormal mammograms except, if in the opinion of the physician, it is warranted despite the possibility of aggravation of the mastitis or stimulation of undiagnosed estrogen-dependent neoplasia.
The physician should be alert to the earliest manifestations of thrombotic disorders (thrombophlebitis, retinal thrombosis, cerebral embolism and pulmonary embolism). If these occur or are suspected, estrogen therapy should be discontinued immediately.
Estrogens may be excreted in the mother's milk and an estrogenic effect upon the infant has been described. The long range effect on the nursing infant cannot be determined at this time.
Hypercalcemia may occur in as many as 15 percent of breast cancer patients with metastases, and this usually indicates progression of bone metastases. This occurrence depends neither on dose nor on immobilization. In the presence of progression of the cancer or hypercalcemia, estrogen administration should be stopped.
A statistically significant association has been reported between maternal ingestion of diethylstilbestrol during pregnancy and the occurrence of vaginal carcinoma in the offspring. This occurred with the use of diethylstilbestrol for the treatment of threatened abortion or high risk pregnancies. Whether or not such an association is applicable to all estrogens is not known at this time. In view of this finding, however, the use of any estrogen in pregnancy is not recommended.
Failure to control abnormal uterine bleeding or unexpected recurrence is an indication for curettage.
Precautions: As with all short acting estrogens, the following precautions should be observed:
A complete pretreatment physical examination should be performed with special reference to pelvic and breast examinations.
To avoid prolonged stimulation of the endometrium and breasts in climacteric or hypogonadal women, estrogens should be administered cyclically (3 week regimen with 1 week rest period—withdrawal bleeding may occur during rest period).
Because of individual variation in endogenous estrogen production, relative overdosage may occur which could cause undesirable effects such as abnormal or excessive uterine bleeding, mastodynia and edema.
Because of salt and water retention associated with estrogenic anabolic activity, estrogens should be used with caution in patients with epilepsy, migraine, asthma, cardiac, or renal disease.
If unexplained or excessive vaginal bleeding should occur, reexamination should be made for organic pathology.
Pre-existing uterine fibromyomata may increase in size while using estrogens; therefore, patients should be examined at regular intervals while receiving estrogenic therapy.
The pathologist should be advised of estrogen therapy when relevant specimens are submitted.
Because of their effects on epiphyseal closure, estrogens should be used judiciously in young patients in whom bone growth is incomplete.
Prolonged high dosages of estrogens will inhibit anterior pituitary functions. This should be borne in mind when treating patients in whom fertility is desired.
The age of the patient constitutes no absolute limiting factor, although treatment with estrogens may mask the onset of the climacteric.
Certain liver and endocrine function tests may be affected by exogenous estrogen administration. If test results are abnormal in a patient taking estrogen, they should be repeated after estrogen has been withdrawn for one cycle.
Adverse Reactions: The following adverse reactions have been reported associated with short acting estrogen administration:
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If the patient has not menstruated within the last two months or more, cyclic administration is started arbitrarily. If the patient is menstruating, cyclic administration is started on day 5 of bleeding. If breakthrough bleeding (bleeding or spotting during estrogen therapy) occurs, increase estrogen dosage as needed to stop bleeding. In the following cycle, employ the dosage level used to stop breakthrough bleeding in the previous cycle. In subsequent cycles, the estrogen dosage is gradually reduced to the lowest level which will maintain the patient symptom-free.
Postmenopause—as a protective measure against estrogen deficiency-induced degenerative changes (*e.g.* osteoporosis, atrophic vaginitis, kraurosis vulvae)—0.3 mg. to 1.25 mg. daily and cyclically. Adjust dosage to lowest effective level.
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From the Files of the KMA Maternal Mortality Study Committee

Case 10-73. The patient was a 17-year-old black, Gravida 3, Para 2, who was admitted to a 34-bed rural hospital at 12:35 a.m. on July 10, 1973. Uterine contractions had begun at approximately 10 p.m. on July 9, 1973. She had delivered her first baby at this same hospital in 1971, and her second in 1972, both without problems. The hospital delivered approximately 100 patients in 1973.

On admission the cervix was found to be 3 cm dilated and the membranes intact. Fetal heart rate was good at 144. Contractions were irregular when admitted. She received an enema and expelled this. At 2 a.m. she was found to be having contractions every two to three minutes. The cervix was 4 cm dilated and membranes intact. At 3 a.m. she was found to be 6 cm dilated and at that time she was sedated with 100 mgms meperidine hydrochloride and scopalomine 0.4 mgm I.M. At 6:30 a.m. she was found to be 8 cm and at 7:35 a.m. she was taken to the delivery room, completely dilated, with membranes intact, so amniotomy was carried out. She delivered spontaneously a 6 lb 3-1/2 oz male infant without lacerations with penthrene for anesthesia. The placenta was expressed intact spontaneously.

At noon that day, she was able to eat, but did not feel well. At 5 p.m. she seemed to be doing very well. At 9:30 p.m. she complained of some abdominal pain and was given an analgesic. She became nauseated at 9:40 and complained of severe chest pain. When she arose in bed, she suddenly fell over. The pulse and blood pressure were unobtainable, and in spite of resuscitative efforts, she died.

The cause of death was listed as pulmonary embolism. No autopsy was done.

Comment

The Committee on Maternal Mortality classified this as an obstetric death with non-preventable factors. Although the cause of death was not proven in this situation, it is likely that this patient died of a pulmonary embolus. Chest pain accompanied by shortness of breath can be quite variable in pulmonary embolus. This combined with air hunger, tachypnea or even just apprehension makes this diagnosis highly likely. The fatality rate among patients during pregnancy or in the immediate postpartum period is not really known. There are undoubtedly many non-fatal cases that are not diagnosed. The incidence of pulmonary embolus during pregnancy or in the puerperum has been reported as 1 in 7,000 deliveries,[1] to 1 to 2700 deliveries.[2] Therefore, this catastrophe can occur and be unavoidable, particularly when a previous thrombophlebitis or phlebothrombosis has not been evident. When an embolus occurs the source of the thrombus may not be obvious. Dalen and Dexter provide a succinct account of the diagnosis and treatment of this problem.[3] In this paper they delineate findings suggestive of pulmonary embolus, aids to differential diagnosis and therapeutic indications. A very interesting paper appeared by Ross, Nowicki and Rangarajan.[4] With the use of radioactive iodine, macroaggregated human serum albumin, they studied asymptomatic pulmonary embolism in the postpartum period. It was shown in this very nice study that pulmonary emboli were demonstrated. Thirteen of 50 patients in the postpartum period were asymptomatic. It is suggested that these may not all be blood clots, but that trophoblastic tissue can be the source of these emboli. Autopsies and studies in vivo by others have suggested that these defects are due to trophoblastic emboli.

References

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3. Dalen and Dexter, *JAMA*, 207:150, 1969.
4. Ross, M., Nowicki, K. and Rangarajan N.S., *Ob. and Gyn.*, Vol, 37: 131, 1971.

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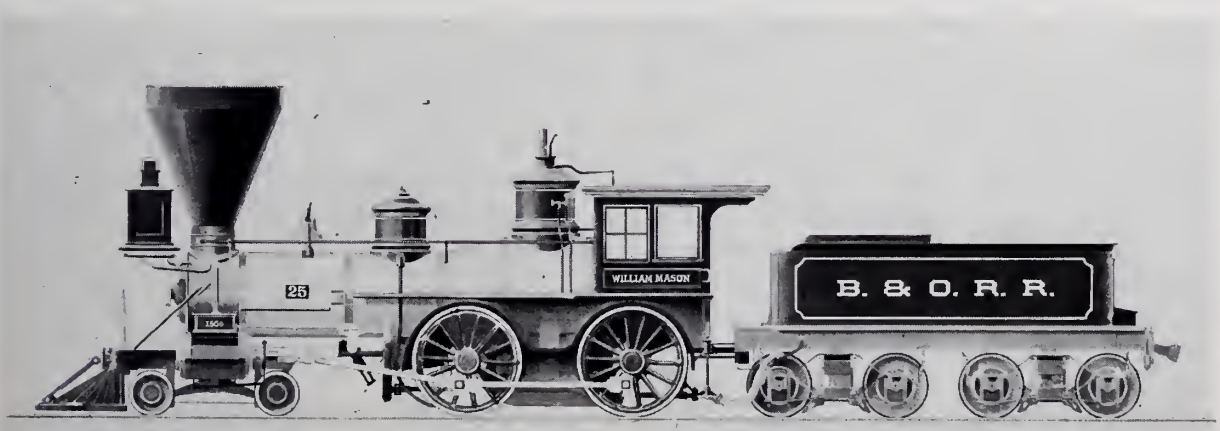
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The William Mason (1856)

Letters to the Editor

To The Editor:

I was interested in your maternal mortality case in the November, 1975, issue. Apparently, this lady died of renal failure with cortical necrosis. I suppose this was due to the coagulopathy induced by the abruptio placenta or dead fetus. Although heparin was mentioned in passing at one point, the conclusion was that she was not properly treated for blood loss and shock. I wonder if you might comment whether heparin should be used prophylactically with this syndrome, or not.

Robert E. Arnold, M.D.
7-D Suburban Medical Plaza
Louisville 40207

To Doctor Arnold:

Your letter concerning the use of heparin in coagulopathies has been referred to me. Heparin has been advocated in the use of disseminated intravascular clotting but opinions are divided as to whether its use should be part of the management of this complication. In a recent report by Beecham and co-workers in *Obstetrics and Gynecology,* #43: 576, 1974, they advocate its use and demonstrate its efficacy in two cases. Other workers do not share this feeling. People such as Pritchard recently stated (*American Journal of Obstetrics and Gynecology,* 123: 551, 1975) "that with regard to disseminated intravascular clotting and the use of heparin, we simply do not give heparin. None of the 154 women with eclampsia received heparin. I know of no series of cases of eclampsia successfully treated with heparin. Justification of the use of heparin demands results that are at least as good when it is not used." This comment was taken from the discussion that Pritchard gave following his report on the management of eclampsia.

We have used heparin at the University of Kentucky, but do not feel that there are substantial or properly done series to advocate its use routinely in coagulopathies.

John W. Greene, Jr., M.D.
Professor and Chairman,
Department of Obstetrics
University of Kentucky Medical Center
Lexington 40506

To Doctor Arnold:

I was forwarded Doctor Arnold's letter for comment. The answer to his question is not a simple one. A more important consideration than heparin use was the treatment of the precipitating event. It would appear that with the patient in a stable condition, the uterus was evacuated in a satisfactory manner. At the time of her initial consultation her condition appeared to be quite stable even though laboratory studies were abnormal. In this setting I would have been content to observe the patient further. However, with the onset of hypertension I believe that aggressive treatment with both replacement therapy in the form of cryo and heparin would have been indicated as hypertension and shock markedly potentiate the disseminated intravascular coagulation syndrome.

Whether the renal shutdown was related to the DIC or is the result of her hypertension remains to be seen.

In obstetrical management such as this, the prompt treatment of the precipitating event in an effective manner is the critical impetus for therapy and the use of heparin and blood products should be considered as secondary in supportive therapy. Doctor Edward Fadell and myself reviewed this subject in some detail in a previous issue of *The KMA Journal* (71, 9: 583, 1973).

Charles E. Dobbs, M.D.
814 Medical Towers
Louisville 40202

Editors Note: *The above comments by Doctors Greene and Dobbs were solicited by the editors in response to the questions raised by Doctor Arnold. Further information on the subject can be found in Mayo Clinic Proceedings, Vol. 49, p. 635-680, September, 1974, and Audio Digest for Internal Medicine, Vol. 22, #20, October 22, 1975.*

FROM THE EDITOR'S NOTEBOOK

Notes of medical and professional interest from a cross-section of America's journals.

Pizzazzless Performance

Inderal (Propranolol hydrochloride) has been hailed as an ANXIOLYTIC agent. I had never seen nor heard this word before but it is in *Dorland's Illustrated Medical Dictionary* (25th Edition) and it means dispelling anxiety. Inderal has been recommended for and used in cases of nervous tachycardia, pre-examination tension and "exam nerves." Perhaps I and others with stage fright before and during public appearances could use Inderal as a prophylactic agent. Psychological stress causes sympathetic nerve endings to release norepinephrine molecules resulting in an increase in the rate and force of the heartbeat via stimulation of beta receptors. This prepares us for emergency reaction and Inderal blocks this action. With a little Inderal, 10-20 mg, three times a day, we may avoid stage fright, but, with it, we may lose the "adrenalin kick" or pizzazz that helps make us polished public speakers, lecturers or performers.

Esra Lamdin, M.D., a Medical Director of the company that manufactures Inderal, warns that its use in anxiety states is not approved and must be considered investigational.

☆ ☆ ☆ ☆

Tinnitus Aurium (What's Ringing in Your Ear)

How fascinating did you find the directory cover of the Bell System Telephone Company for October, 1975? It is a salute to the 200th birthday of our United States and the 100th birthday of the telephone. Shown on the covers are 32 guests of honor and all have a famous phone from yesterday or today.

Benjamin Franklin, advisor to monarchs and presidents and an advisor regarding medical subjects, is first on the front cover; he had his problems with gout and urinary bladder stones, but he is ahead of George Washington who is portrayed next to last on the back cover. The father of our country had wooden artificial dentures, suffered acute pneumonia, had an abscess of his thigh and died of quinsy, although a potentially lifesaving tracheostomy had been recommended. Thomas Jefferson who distrusted physicians generally and had an interesting medical history is shown without evidence of his migraine headaches, recurrent dysentery or prostatic hypertrophy.

Lincoln listening and talking caused me to recall that he probably had Marfan's syndrome and the child, Shirley Temple, reminded me of the contributions she, as an adult, makes to the American Cancer Society. John D. Rockefeller, a great philanthropist toward our science and profession, is shown with his wig because he developed generalized alopecia in 1890. He died at age 98 of sclerosing myocarditis.

In the sixth spot is the American Indian with smoke signals emanating from the receiver. Do the signals warn him of his poor tolerance of "fire water" and that the incidence of tribal alcoholism is high? In a recent *New England Journal of Medicine* article (294: 9-12, 1976) Bennion and Li report a study that "showed no significant difference between American Indians and whites in rates of alcohol metabolism."

The interesting covers are in color but there is a black and white theme too, if you look carefully. Jackie Robinson, the first black to play major league baseball, is in position 22. His physiognomy portrays great tension and stress as he uses the white telephone; this tension and stress could lead to hypertension to which the black male is susceptible and tolerates poorly. The salutary changes in Robinson's facial expression is evident with the use of the black telephone! This would indicate psychotherapeutic control of hypertension which is reported interestingly by Richard Stone and Javies De Leo in the January 8, 1976, issue of the *New England*

Journal of Medicine. This variety of treatment—psychotherapeutic control— produced decreased blood pressure levels in patients with hypertension who practiced transcendental meditation. (*J. Chr. Dis.* 27: 163-169, March, 1974) and for a good subject review on hypertension look in the *Mayo Clinic Proceedings* for December, 1975, pages 709 through 720.

☆ ☆ ☆ ☆

Country Breakfasts and Quotable Quotes

The December, 1975, issue of *The Harvard Medical School Health Letter* starts off with the headlines, WHAT YOU SHOULD KNOW ABOUT HEART ATTACKS BEFORE YOU DIE FROM ONE. That forcefully gripping eye-catcher is followed by a listing of the famous risk factors and #5 is BLOOD FATS. These "blood fats," related to coronary artery disease, can be successfully reduced by diet modification.

Wyatt Norvell of New Castle entertains a few friends and colleagues with a country style breakfast on the first Sunday morning of each New Year. He has been doing this for the past 30 years and some of his dietary statistics are impressive and relevant. During this period his guests have consumed 826 pounds of country ham, 51 pounds of country sausage, 2466 eggs, 4488 hot biscuits, and he doesn't even mention the volume of red-eye gravy or pounds of butter. Wyatt serves delicious honey, jams and jellies as well as sorghum molasses and these are surely as hypertriglyceridemico-genic as can be!

The same health letter ends with the quote of the month: "It is generally assumed that people would rather be well than sick and that they would rather live longer than shorter lives. But many people really don't behave that way. It is a crime to commit suicide quickly. However, to kill oneself slowly by means of an unhealthy life-style is readily condoned and even encouraged."

The country breakfasts are irresistibly delicious but the quote from Leon S. White's paper, "How to Improve the Public Health," gives cause to pausal reflection. Decisions, decisions! Will our Psychiatric consultant respond?



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FOR LONG-TERM CONTROL OF HYPERTENSION*

Serum K^+ and BUN should be checked periodically. (See Warnings Section.)



Before prescribing, see complete prescribing information in SK&F literature or *PDR*. The following is a brief summary.

Warning
This fixed combination drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

***Indications:** *Edema:* That associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. *Mild to moderate hypertension:* Usefulness of the triamterene component is limited to its potassium-sparing effect.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 capsules; in Single Unit Packages of 100 (intended for institutional use only).

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Effectiveness across the spectrum of most common forms of insomnia

Awake too long, awake too often, awake too early...

These are the most common forms of insomnia, and may occur singly or in any combination. The night of troubled sleep depicted here comprises all three types. As the night progresses from left to right, each sleep stage is identifiable by its own shade of gray. Blue represents "Awake."

As you can see, this hypothetical "patient" takes well over an hour to fall asleep, awakens several times during the middle of the night and awakens too early in the morning.

Sleep Stages

- Awake
- REM
- Stage 1
- Stage 2
- Stage 3
- Stage 4



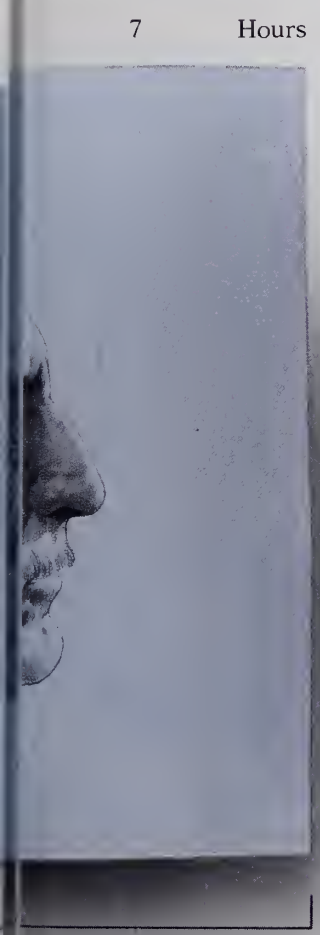
The insomnias most often ccurring in young and older adults

For patients with trouble falling asleep ommon in young adult insomnia patients), almane (flurazepam HCl) 30 mg provides sleep ithin 17 minutes, on average. For those with ouble staying asleep or sleeping long nough (common in those over 50), Dalmane fers increased total sleep time with fewer octurnal awakenings. These clinical results ere demonstrated in studies conducted in ur geographically separated sleep search laboratories[1-4]

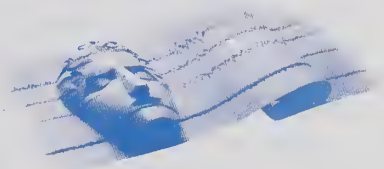
The relative safety of Dalmane (flurazepam HCl) is well documented

Dalmane (flurazepam HCl) is relatively safe and well tolerated; morning "hang-over" has been infrequent. The usual adult dosage is 30 mg; in elderly or debilitated patients, limit initial dosage to 15 mg to preclude over-sedation, dizziness or ataxia. Caution patients about possible combined effects with alcohol and other CNS depressants.

Broad-spectrum medication for the most common forms of insomnia



Awake too early



Dalmane®
(flurazepam HCl)

One 30-mg capsule *h.s.*— usual adult dosage (15 mg may suffice in some patients).
One 15-mg capsule *h.s.*— initial dosage for elderly or debilitated patients.

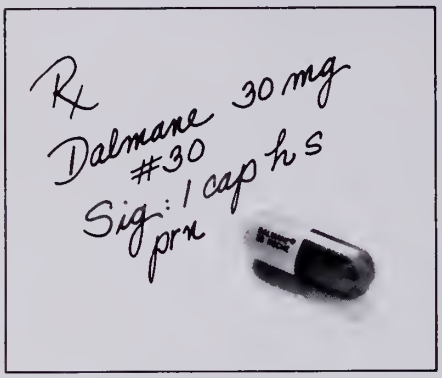
- ☐ induces sleep rapidly
- ☐ reduces nighttime awakenings
- ☐ lengthens total sleep time

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Please see following page for a summary of complete product information.

Broad-spectrum medication for the most common forms of insomnia

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(flurazepam HCl) Ⓒ IV



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- □ induces sleep within 17 minutes, on average
- □ reduces nighttime awakenings
- □ provides 7 to 8 hours sleep, on average, without repeating dosage

Before prescribing Dalmane (flurazepam HCl), please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have also been reported in rare instances.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.

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1. Karacan I, Williams RL, Smith JR: The sleep laboratory in the investigation of sleep and sleep disturbances. Scientific exhibit at the 124th annual meeting of the American Psychiatric Association, Washington DC, May 3-7, 1971

2. Frost JD Jr: A system for automatically analyzing sleep. Scientific exhibit at the 24th Clinical Convention of the American Medical Association, Boston, Nov 29-Dec 2, 1970; and at the 42nd annual scientific meeting of the Aerospace Medical Association, Houston, Apr 26-29, 1971

3. Vogel GW: Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ

4. Dement WC: Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ



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ORGANIZATION SECTION

Two KMA Members Appointed To Committees of AMA

Two Kentucky physicians were recently appointed by the Board of Trustees of the American Medical Association to serve on two of its committees and councils.

Henry B. Asman, M.D., Louisville, was reappointed to the Committee on Insurance. Doctor Asman, a past President of KMA, serves as Associate Editor of *The Journal*.

Newly appointed to the AMA Council on Legislation was Fred C. Rainey, M.D., Elizabethtown. Also a past KMA President, Doctor Rainey serves on KMA's Committee on National Legislative Activities and Committee on State Legislative Activities.

Oral Cancer Symposium Set For Feb. 28 at U of L

The 12th Annual Symposium on Oropharyngeal Cancer will be held Saturday, February 28, in the Health Science Center Auditorium at the University of Louisville School of Medicine. Sponsored by the U of L School of Medicine and the School of Dentistry, the symposium is open to all physicians and dentists and will run from 8:30 a.m. to 12:30 p.m.

"Special Topics in Oropharyngeal Cancer" will include presentations on "Salivary Glands Neoplasias" by Ronald H. Spiro, M.D., New York; "Cancer Syndromes" by Robert Gorlin, DDS, MS, Rochester; and "Patient Psychology in Head and Neck Cancer" by Danielle Turns, M.D., Louisville.

Credit hours have been requested from the U of L Continuing Education Program, American Academy of Family Physicians, and the Kentucky and American Dental Associations.

The Oral Cancer Diagnostic Clinic of the University of Louisville is now located on the second floor of the clinic wing at General Hospital; telephone 589-4321, ext. 339.

MINI-RESIDENCIES (one, two and three weeks) for Medical and Surgical Practitioners in "Office Management of Emotional Problems" offered on a monthly basis by the Department of Outpatient Psychiatry at the University of Kentucky Medical Center. 40 units per week of Continuing Education Credit. Tuition — $350 per week. For further information, contact: Maxie C. Maultsby, Jr., M.D., Office of Continuing Education, UKMC, 800 Rose Street, Lexington, 40506.

NEWS ITEMS

Donald W. Giffen and **Avil L. McKinney** were recently elected as President-Elect and Executive Vice President-Elect, respectively, of Blue Cross and Blue Shield and Delta Dental of Kentucky. They will assume their new offices on August 15, 1976, at which time **J. Ed McConnell,** President of the three boards, will become Advisory Chairman to the corporate boards.

Raymond F. Dixon, an executive officer of the Rural Kentucky Medical Scholarship Fund from 1949 to 1956, died on January 1 in Murray at the age of 71. He was also deputy state health commissioner and served as division director of health manpower for the National Institute of Health. Mr. Dixon was a founder of Blue Cross and Blue Shield in Kentucky and was a two-time secretary and assistant treasurer of the Kentucky Physicians Mutual, Inc.

In Memoriam

J. VERNON PACE, M.D.
Paducah
1896-1975

James Vernon Pace, M.D., died on December 22 at the age of 79. A general surgeon, Doctor Pace graduated from Vanderbilt University in 1921 and began practice in Paducah in 1928, retiring in 1971. He was one of the founders of Kentucky Blue Shield and was a past Chairman of its Board of Directors. Active in KMA affairs, Doctor Pace was an AMA Delegate and Alternate Delegate and served as Board Chairman in 1956. He was a Life Fellow of the American College of Surgeons and helped to found the Kentucky Surgical Society. Doctor Pace was an emeritus member of the McCracken County Medical Society, as well as the Kentucky and American medical associations.

HENRY C. MAXWELL, M.D.
Louisville
1897-1976

Henry C. Maxwell, M.D., 78, died in Louisville on January 6. A 1923 graduate of Meharry Medical College, Doctor Maxwell was a general practitioner for 53 years, practicing in Frankfort as well as in Louisville.

FRANK E. REEDER, M.D.
Paducah
1931-1975

Frank E. Reeder, Jr., M.D., 44, died on December 23 in Paducah. A general surgeon specializing in colon and rectal surgery, Doctor Reeder was a 1957 graduate of the University of Louisville School of Medicine. He was a Fellow of the American College of Surgeons and a member of the American Board of Co-Rectal Surgeons. He also belonged to the McCracken County Medical Society and Kentucky and American medical associations.

VERNARD F. VOSS, M.D.
Louisville
1916-1976

Vernard Franklin Voss, M.D., died on January 6 at the age of 59. A family practitioner, Doctor Voss had graduated from the University of Louisville School of Medicine in 1943. He belonged to the Jefferson County Medical Society and the Kentucky Medical Association.

BENJAMIN B. JACKSON, M.D.
Louisville
1926-1976

Benjamin B. Jackson, M.D., 49, died on January 7. A 1952 graduate of Harvard Medical School, Doctor Jackson practiced general surgery in Louisville from 1958 until his retirement in 1973. He was a member of the American College of Surgeons, as well as the Jefferson County Medical Society and Kentucky Medical Association.

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PRESCRIBING INFORMATION
Antiminth (pyrantel pamoate) Oral Suspension

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13μg/ml.) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with pre-existing liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

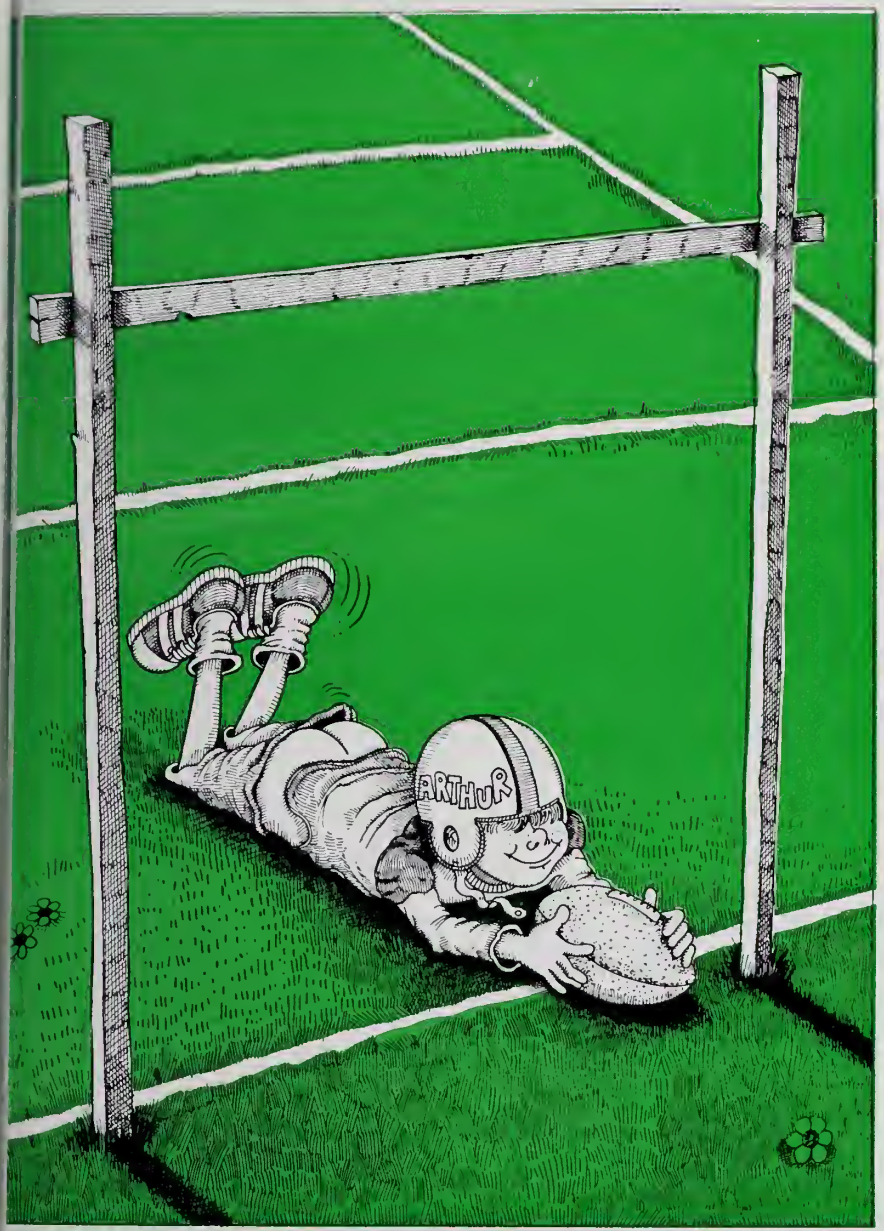
Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg. of pyrantel base/ml.) should be administered in a single dose of 11 mg. of pyrantel base per kg. of body weight (or 5 mg./lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 cc. of Antiminth per 10 lb. of body weight. (One teaspoonful = 5 cc.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

How Supplied. Antiminth is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg. pyrantel base per ml., supplied in 60 cc. bottles and Unitcups™ of 5 cc. in packages of 12.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

WORMS BLITZED



A single dose of Antiminth (1 cc. per 10 lbs. of body weight, 1 tsp./50 lbs.—maximum dose, 4 tsp.=20 cc.) offers highly effective control of *both* pinworms and roundworms.

Antiminth has been shown to be extremely well tolerated by children and adults alike in clinical studies.* Pleasantly caramel-flavored, it is non-staining to teeth and oral mucosa on ingestion... doesn't stain stools, linen or clothing.

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(pyrantel pamoate)

equivalent to 50 mg. pyrantel/ml.

ORAL SUSPENSION

*Data on file at Roerig

Please see prescribing information on facing page.

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Anusol-HC® Cream: Rx only. Each gram contains: Hydrocortisone Acetate 5.0 mg; Bismuth Subgallate 22.5 mg; Bismuth Resorcin Compound 17.5 mg; Benzyl Benzoate 12.5 mg; Peruvian Balsam 17.5 mg; Zinc Oxide 110.0 mg. Also contains the following inactive ingredients: propylene glycol, bismuth subiodide, propylparaben, methylparaben, polysorbate 60 and sorbitan monostearate in a water-miscible base of mineral oil and glyceryl monostearate. Non-staining.

Anusol-HC® Suppositories: Rx only. Each contains: Hydrocortisone Acetate 10.0 mg; Bismuth Subgallate 2.25%; Bismuth Resorcin Compound 1.75%; Benzyl Benzoate 1.2%; Peruvian Balsam 1.8%; Zinc Oxide 11.0%. Also contains the following inactive ingredients: bismuth subiodide, calcium phosphate, and coloring in a bland, hydrogenated oil-cocoa butter base.

CAUTION: Federal law prohibits dispensing Anusol-HC® Cream and Anusol-HC® Suppositories without prescription.

for the maintenance and protection phase

Anusol Suppositories and Ointment: Except for hydrocortisone acetate, these forms contain the same percentages of active ingredients as listed above.

Contraindications: History of sensitivity to any component. Topical corticosteroids should not be employed in tuberculous, fungal and most viral lesions of skin (including herpes, vaccinia and varicella).

Warnings: The safe use of topical steroids during pregnancy has not been fully established. Therefore, during pregnancy they should not be used unnecessarily on extended areas, in large amounts or for prolonged periods of time.

Precautions: Symptomatic relief should not delay definitive diagnoses or treatment. When there is bacterial skin infection, topical corticosteroids should be used only with appropriate concomitant anti-microbial therapy. Prolonged or excessive use of corticosteroids might produce systemic effects.

Dosage and Administration: Anusol-HC Cream: *Adults*—Remove tube cap and attach the plastic applicator. After gentle bathing and drying of the area, apply to the exterior surface and gently rub in. For internal use, insert the applicator by applying gentle, continuous pressure. Then squeeze the tube to deliver medication. Cream should be applied 3 or 4 times a day for 3 to 6 days or until inflammation subsides. Then maintain patient comfort with regular Anusol Suppositories or Ointment.

Anusol-HC Suppositories: One suppository in the morning and one at bedtime, for 3 to 6 days or until inflammation subsides. Then maintain patient comfort with regular Anusol.

Anusol Suppositories: One in the morning, one at bedtime; and one immediately following each evacuation.

Anusol Ointment: Apply freely to the anoderm as often as necessary, usually 2 to 4 times a day.

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is a famous fighter, too.

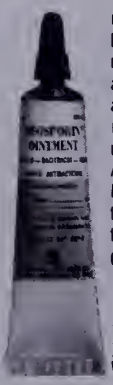
Provides overlapping, broad-spectrum antibacterial action to help combat infection caused by common susceptible pathogens (including staph and strep).

Each gram contains: Aerosporin® brand Polymyxin B Sulfate 5,000 units; zinc bacitracin 400 units; neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin base); special white petrolatum qs in tubes of 1 oz and 1/2 oz and 1/32 oz (approx.) foil packets.

INDICATIONS: Therapeutically (as an adjunct to systemic therapy when indicated) for topical infections, primary or secondary, due to susceptible organisms, as in: • infected burns, skin grafts, surgical incisions, otitis externa • primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia) • secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis) • traumatic lesions, inflamed or suppurating as a result of bacterial infection.

Prophylactically, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing. **CONTRAINDICATIONS:** Not for use in the eyes or external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of the components. **WARNING:** Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended. **PRECAUTIONS:** As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs. **ADVERSE REACTIONS:** Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

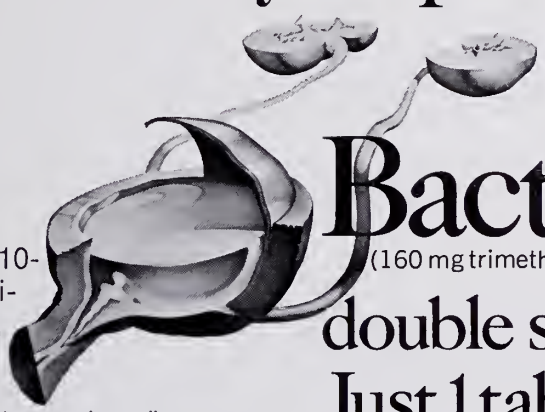
Complete literature available on request from Professional Services Dept. PML.



Wellcome

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10-day Bactrim therapy outperforms 10-day ampicillin therapy.



In a multicenter, double-blind study of patients with chronic or frequently recurrent urinary tract infection, Bactrim 10-day therapy outperformed ampicillin 10-day therapy by 27.2%, when comparing patients who maintained clear cultures for eight weeks. Criterion for "clear culture" was 100,000 or fewer organisms/ml of urine.

While adverse reactions were mild (*e.g.*, nausea, rash), more serious reactions can occur with these drugs. See manufacturers' product information for complete listing.

Note: Bactrim single strength tablets were used in these clinical trials. However, studies have established the bioequivalency of Bactrim DS with the single strength tablets.

Bactrim™ T.M. DS

(160 mg trimethoprim and 800 mg sulfamethoxazole)

double strength tablets Just 1 tablet B.I.D.

Bactrim™ T.M.

(80 mg trimethoprim and 400 mg sulfamethoxazole)

2 tablets B.I.D.

For chronic or frequently recurrent cystitis and pyelonephritis due to susceptible organisms.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Chronic urinary tract infections evidenced by persistent bacteriuria (symptomatic or asymptomatic), frequently recurrent infections (relapse or reinfection), or infections associated with urinary tract complications, such as obstruction. Primarily for cystitis, pyelonephritis or pyelitis due to susceptible strains of *E. coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris* and *Proteus morganii.*

NOTE: The increasing frequency of resistant organisms limits the usefulness of antibacterials, especially in these urinary tract infections. The recommended quantitative disc susceptibility method (*Federal Register, 37*:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers.

Warnings: Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted. **Data are insufficient to recommend use in infants and children under 12.**

Precautions: Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for children under 12. Usual adult dosage: 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

For patients with renal impairment:

Creatinine Clearance (ml/min)	Recommended Dosage Regimen
Above 30	Usual standard regimen
15-30	1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) every 24 hours
Below 15	Use not recommended

Supplied: Double Strength (DS) tablets, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100. Tablets, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole — bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40, available singly and in trays of 10.

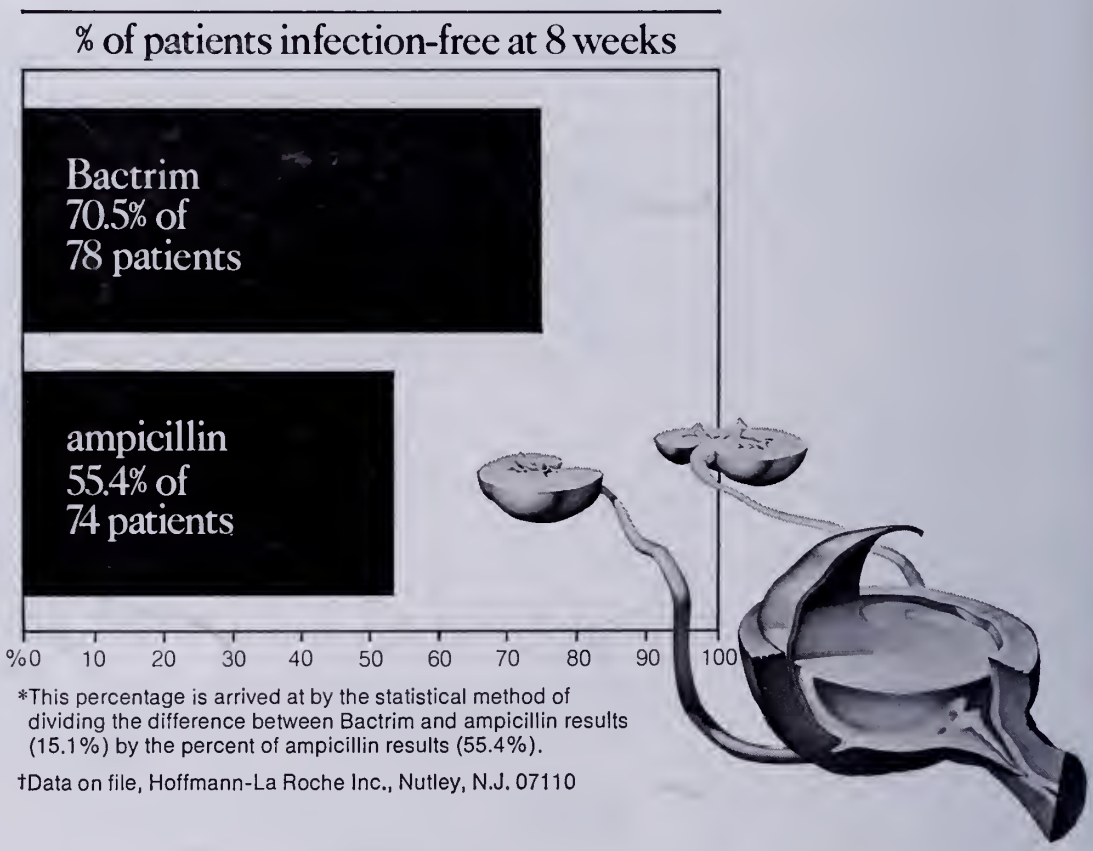
Oral suspension, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole; fruit-licorice flavored — bottles of 16 oz (1 pint).

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In a multicenter study of patients with chronic or frequently recurrent urinary tract infections

Bactrim™ was 27.2%* more effective than ampicillin in keeping patients infection-free for 8 weeks.†



*This percentage is arrived at by the statistical method of dividing the difference between Bactrim and ampicillin results (15.1%) by the percent of ampicillin results (55.4%).

†Data on file, Hoffmann-La Roche Inc., Nutley, N.J. 07110

Bactrim™ DS
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double strength tablets
Just 1 tablet B.I.D.

Bactrim™
(80 mg trimethoprim and 400 mg sulfamethoxazole)
2 tablets B.I.D.

Please see summary of product information on preceding page.

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MDS

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UME 74 MARCH 1976 NUMBER 3

Both often



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

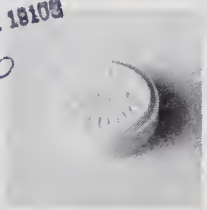
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According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.



Valium®
(diazepam) IV

2-mg, 5-mg, 10-mg scored tablets

in psychoneurotic
anxiety states
with associated
depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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e.g. the pain of surgical convalescence



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Volume 74 • March 1976

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Journal of The KENTUCKY Medical Association

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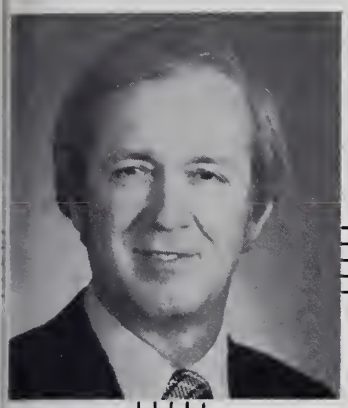
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MESSAGE FROM THE PRESIDENT

AT the time of this writing the General Assembly has been convened for a number of weeks. There have been a number of bills with health implications introduced and under the guidance of Legislative Affairs Chairman, Doctor Carl Cooper, KMA is facing them squarely. It is too early to predict the outcome of many of these pieces of legislation at the time of this writing, but you can rest assured that a great deal of effort on your behalf has been expended by your KMA leaders.

Medical liability continues to be a national problem and even though the House of Delegates, Board of Trustees and Governor's Special Task Force have all struggled with the problem, one solution does not seem imminent. Rather, it is your President's opinion, that medical liability problems will have to be faced again at the next Legislature and hopefully by that time insurance availability, constitutionality and other factors will be ironed out so that a permanent solution will be available for us. In the meantime, the 1976 Legislature must content itself with making malpractice available to hospitals and physicians at a reasonable cost and as of this writing, I feel confident that they will be successful.

In recent weeks we have had little time for anything other than legislation but the staff and your officers have tried to keep abreast of the national scene. There seems to be a general national feeling that the economics of the country will not permit further expansion of any welfare program, a welcomed respite by most of us beleaguered professionals. In general, I think the philosophical tenor of the country is in the direction of conservatism and this decrease in Federal legislation pertaining to Health is certainly pleasing to most physicians.

The one exception of the new legislation which all physicians need to be made aware of is Public Law 93-641, pertaining to Health Service Areas. All physicians throughout the Commonwealth need to become familiar with this piece of legislation and its many implications which will profoundly affect each one of us.

David A Hunt



Testing in Humans: Who, Where & When.

he weight of ethical opinion:

Few would disagree that the effectiveness and safety of any therapeutic agent device must be determined through nical research.

But now the *practice* of clinical research is under appraisal by Congress, the ress and the general public. Who shall minister it? On whom are the products be tested? Under what circumstances? nd how shall results be evaluated and ilized?

The Pharmaceutical Manufacturers ssociation represents firms that are significantly engaged in the discovery and velopment of new medicines, medical vices and diagnostic products. Clinical search is essential to their efforts. Consequently, PMA formulated positions hich it submitted on July 11, 1975, to e Subcommittee on Health of the Sene Labor and Public Welfare Committee, its official policy recommendations. ere are the essentials of PMA's current inking in this vital area.

1. PMA supports the mandate and ission of the National Commission for e Protection of Human Subjects of iomedical and Behavioral Research and ffers to establish a special committee mposed of experts of appropriate isciplines familiar with the industry's search methodology to volunteer its rvice to the Commission.

2. PMA supports the formation of an ndependent, expert, broadly based and presentative panel to assess the current tate of drug innovation and the impact pon it of existing laws, regulations and rocedures.

3. When FDA proposes regulations, should prepare and publish in the *Federal Register* a detailed statement assessng the impact of those regulations on rug and device innovation.

4. PMA proposes that an appropritely qualified medical organization be ncouraged to undertake a comprehenive study of the optimum roles and esponsibilities of the sponsor and physian when company-sponsored clinical esearch is performed by independent linical investigators.

5. PMA recognizes that the physician-investigator has, and should have, the ultimate responsibility for deciding the substance and form of the informed consent to be obtained. However, PMA recommends that the sponsor of the experiment aid the investigator in discharging this important responsibility by providing (1) a document detailing the investigator's responsibilities under FDA regulations with regard to patient consent, and (2) a written description of the relevant facts about the investigational item to be studied, in comprehensible lay language.

6. In the case of children, the sponsor must require that informed consent be obtained from a legally appropriate representative of the participant. Voluntary consent of an older child, who may be capable of understanding, in addition to that of a parent, guardian or other legally responsible person, is advisable. Safety of the drug or device shall have been assessed in adult populations prior to use in children.

7. PMA endorses the general principle that, in the case of the mentally infirm, consent should be sought from both an understanding subject and from a parent or guardian, or in their absence, another legally responsible person.

8. Pharmaceutical manufacturers sponsoring investigations in prisons must take all reasonable care to assure that the facilities and personnel used in the conduct of the investigations are suitable for the protection of participants, and for the avoidance of coercion, with a respect for basic humanitarian principles.

9. Sponsors intending to conduct nontherapeutic clinical trials through the participation of employee volunteers should expand the membership and scope of its existing Medical Research Committee, or establish such an internal Medical Research Committee, with responsibility to approve the consent forms of all volunteers, designs, protocols and the scope of the trial. The Committee should also bear responsibility to ensure full compliance with all procedures intended to protect employee volunteers' rights.

10. Where the sponsor obtains medical information or data on individuals, it shall be accorded the same confidential status as provided in codes of ethics governing health care professionals.

11. PMA and its member firms accept responsibility to aid and encourage appropriate follow-up of human subjects who have received investigational products that cause latent toxicity in animals or, during their use in clinical investigation, are found to cause unexpected and serious adverse effects.

12. PMA supports the exploration and development by its member companies of more systematic surveillance procedures for newly marketed products.

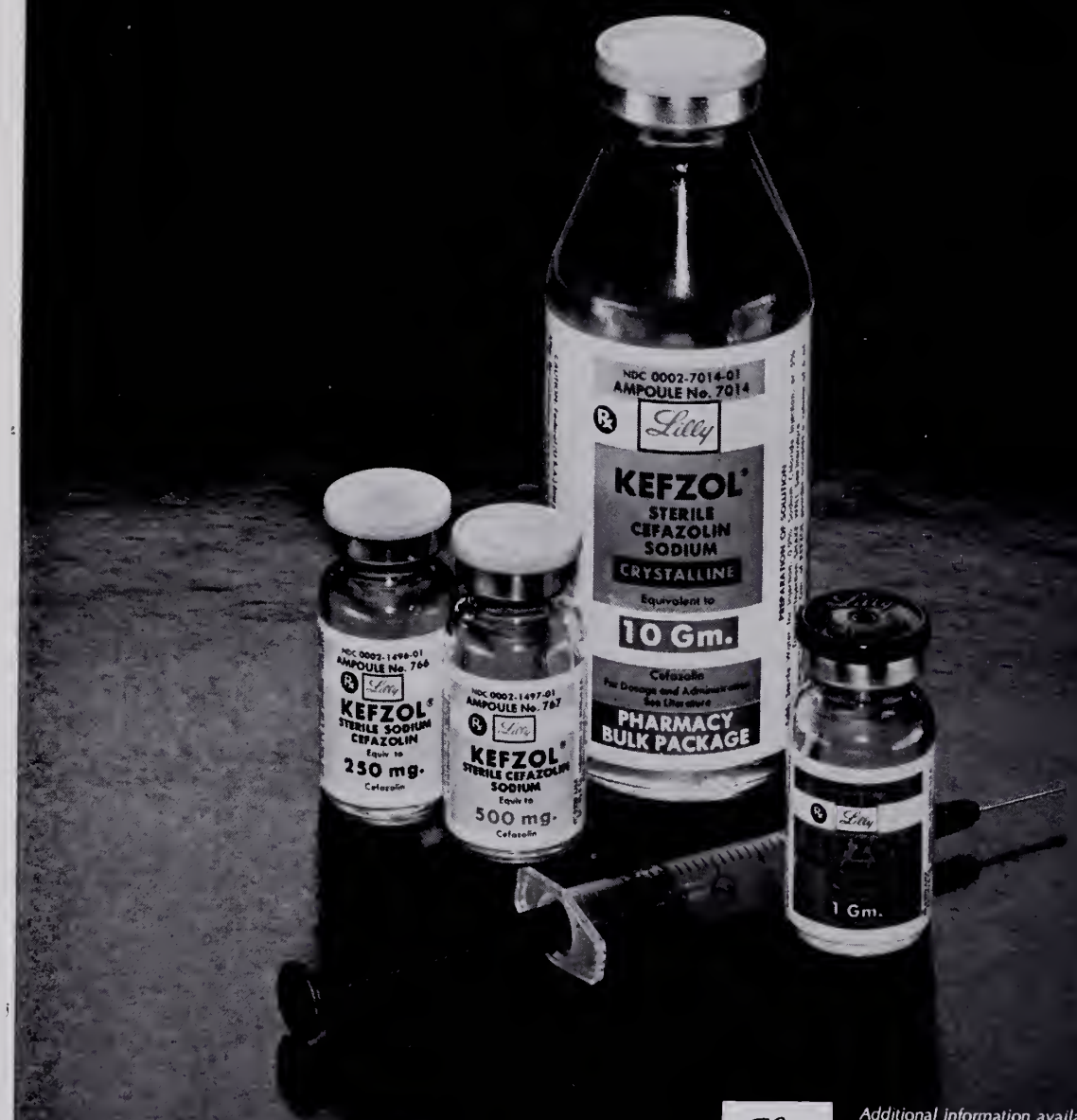
13. When a pharmaceutical manufacturer concludes, on the basis of early clinical trials of a basic new agent, that a new drug application is likely to be submitted, a proposed development plan accompanied by a summary of existing data, would be submitted to the FDA. Following a review of this submission, the FDA, and its Advisory Committee where appropriate, would meet with the sponsor to discuss the development plan. No *formal* FDA approval should be required at this stage. Rather, the emphasis should be on identification of potential problems and questions for the sponsor's further study and resolution as the program develops.

The PMA believes that health professionals as well as the public at large should be made aware of these 13 points in its Policy on Clinical Research. For these recommendations envisage constructive, cooperative action by industry, research institutions, the health professions and government to encourage creative and workable responses to issues involved in the clinical investigation of new products.

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Management of Injuries to the Suprahepatic Vena Cava†

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Bowling Green, Kentucky and Denver, Colorado

A modification of the internal vena caval bypass technique for vascular isolation of the liver was used to repair a laceration of the suprahepatic cava. Advantages over previously described techniques are discussed.

MASSIVE liver injuries from blunt trauma are an unsolved problem. The mortality from all liver injuries in recent years is between 8% and 25%.[4,5,7,9,10] While the mortality for penetrating injuries to the liver ranges from 8% to 14%,[5,9,10] blunt trauma is associated with a mortality rate of 24% to 65%.[7,9,10] The major problem is exsanguination. In a series of 285 cases recently reported by Lim, 10% died at the operating table from bleeding, representing over half the total mortality.[4] Inability to control bleeding from the hepatic veins, the juxtahepatic vena cava, and the liver parenchyma are responsible for most operative deaths. (5.6) It would seem that improvement in the management of these injuries can best be made by improvement in techniques for controlling bleeding.

Of course, other factors are quite important. Owens showed that mortality increased with the presence of associated injuries, from 8.5% when the liver was injured alone, to 35% when two other organs were involved.[7] Penetrating injuries to the liver are associated with injuries to the diaphragm, lung, stomach, small bowel and other organs near the liver. In blunt trauma, more distant organs, such as spleen, lung, head and long bones are often injured. But while the presence of associated injuries is extremely important, their existence is beyond the surgeon's control.

The major difficulty in control of hemorrhage from the liver is repairing damage to the veins draining the liver deep in the blood-filled operative field. This paper will discuss the current methods of management of injuries to the juxtahepatic venous structures. A modification of the hepatic bypass introduced by Schrock, *et. al.*,[9] and modified by Bricker, *et. al.*,[1] and Williams, *et. al.*[10] was successfully applied in a young girl with laceration of the suprahepatic inferior vena cava.

Case Report

A 14-year-old girl was admitted to Ireland Army Hospital in October, 1973, a few minutes after being injured in an automobile crash. In the emergency room she had a blood pressure 90/60 mm Hg, a pulse of 112 and a respiratory rate of 30 per minute. She was alert and in moderate distress, complaining of left chest and right shoulder pain. Her abdomen was tender in the right upper quadrant. Breath sounds were decreased on the left. An abdominal roentgenogram was normal and a chest roentgenogram showed contusion of the left lung. Her hematocrit was 32%. After she was given

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Paper submitted: 7-14-75.

1,000 ml of lactated Ringer's solution, her blood pressure rose to 120-80 mg Hg. Her abdominal pain became more pronounced. Although her vital signs remained stable and her abdomen was not distended, it was thought that she had intra-abdominal bleeding and laparotomy was performed. She was found to have a stellate laceration involving both lobes of the liver together with a 4 cm tear in the suprahepatic portion of the inferior vena cava. The injury was repaired through a thoraco-abdominal incision using an internal caval shunt, with vascular isolation of the liver and cava-atrial bypass. (Fig. 1) The technique will be discussed below. Twelve units of whole blood were given.

Postoperatively, the most immediate problem was respiratory insufficiency, probably due to pulmonary contusion exacerbated by the thoraco-abdominal incision. She required tracheostomy with continuous positive pressure ventilation initially, and was on ventilatory support for ten days. Chest roentgenograms showed left pulmonary consolidation for a week, and then slow clearing.

There was minimal drainage of bile and blood postoperatively. Her liver function changes were similar to those described by Pinkerton, *et al.*[8] The SGOT and LDH were elevated initially, gradually returning to normal during the first week. The bilirubin and alkaline phosphatase showed a more gradual rise and a later peak, returning to normal during the second week. She was discharged on the 30th postoperative day. There was one subsequent hospitalization for upper abdominal pain and fever which were treated conservatively and cleared in two days. Liver function studies were normal.

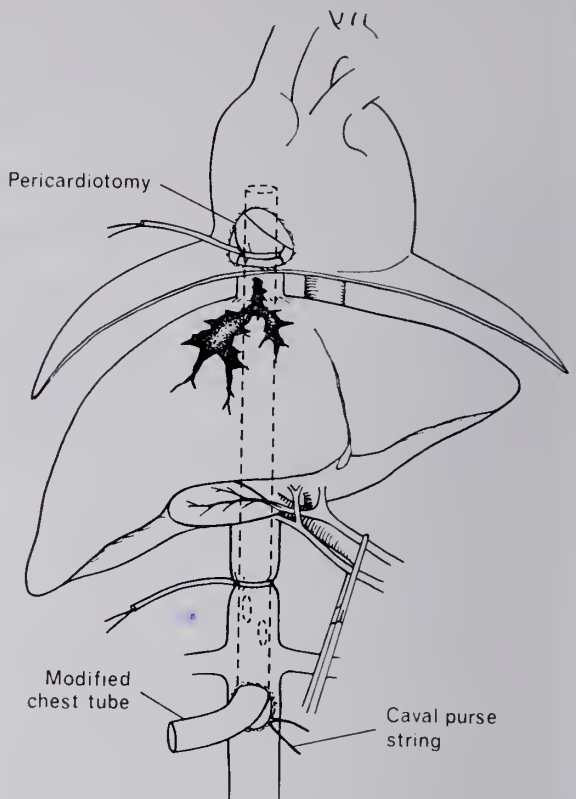


FIG. 1—Laceration of suprahepatic inferior vena cava and liver as seen in patient; infracaval bypass in place.

Discussion

Injuries to the suprahepatic cava require immediate vascular control to prevent exsanguination before the injury can be repaired. Yellin, *et. al.*,[11] reported successful management by partial cross clamping of the vena cava at the site of injury, but this method is limited to small and easily accessible lacerations. For large lacerations, a more elaborate vascular isolation technique is necessary.

Heaney, *et. al.*,[3] advocated isolating the liver by clamping the inferior vena cava above and below the liver, the abdominal aorta above the celiac axis and the porta hepatis. This was used in elective resection of the liver in normothermic individuals with occlusion times of 30 minutes or less. Hepatic function was not impaired. However, cutting off the blood supply to the lower half of the body has not been widely accepted in the management of liver injuries. Methods were sought to isolate the liver without occluding vena caval flow.

An internal shunt was first used experimentally by Buckberg[2] in 1967, placing a shunt in the vena cava from the renal veins to the right atrium. In 1968, Schrock, *et. al.*,[9] used the internal shunt principle in a patient to bypass the injured vessels of the liver. The shunt was inserted from the right atrium to the supravenal cava. The end of the tube was left protruding from the right atrium, leaving the option of infusing blood through the catheter. Although hemorrhage was controlled, the patient died. This technique has subsequently been successfully employed by Bricker, *et. al.*,[1] and by Owens, *et. al.*[7]

The method employed in our patient used the same internal shunt principle. After extension of the incision into the right chest, tapes were placed around the intra-pericardial inferior vena cava and the subhepatic cava above the renal veins. A pursestring suture was placed in the infrarenal cava. A #36 Argyle chest catheter was modified. First, the tip was cut back to the first sidehole. Second, two new sideholes were cut in the catheter about 8″ from the tip, so that with the tip in the atrium, the new sideholes would be opposite the renal veins.

The catheter was inserted through the pursestring suture, which was then tightened with a tourniquet; the protruding catheter end was clamped. Both caval tapes were tightened with tourniquets to achieve venous bypass of the liver.

(Fig. 1) The porta hepatis was clamped with a noncrushing clamp to occlude arterial and portal inflow. A dry field was obtained, permitting repair of the caval injury and debridement of the liver injury. Hepatic resection would have been quite feasible with the bypass in place; in the present case, the laceration was extensive but centrally located, and resection was not indicated. Repair and debridement took 18 minutes, after which the shunt was removed and the clamp taken off the porta hepatis. Minor suturing and further debridement of the liver could then be completed.

Anti-coagulants were not used, and no thrombosis was noted on the catheter. The hazards of anticoagulation in this setting probably outweigh the risks of catheter thrombosis or pulmonary embolus during the relatively short period of bypass.

Adequate volume replacement is essential. A previous case done by one of us (RF) had cardiac arrest during the bypass, and could not be resuscitated. The catheter end protruding from the infrarenal cava may be used for rapid intraoperative transfusion to correct hypovolemis while the liver injury is being repaired.

This technique offers advantages over previously described techniques. The shunt can be inserted and removed without placing sutures in the heart. Leaving the catheter protruding from the infrarenal vena cava not only facilitates blood replacement but also makes it easy to remove the catheter at the conclusion of the bypass. The catheter end is more accessible than if it were protruding from the right atrium, but does not interfere with exposure of the liver. Perfusion of the abdominal viscera and adequate drainage of the infra-hepatic vena cava are maintained. Vascular isolation of the liver permits repair of major hepatic and venous injuries without significant impairment of hepatic function. This technique can be applied not only to injuries of the suprahepatic vena cava but also to any major liver injury associated with severe hemorrhage.

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Computerized Transverse Axial Tomography*

Leonidas Mostowycz, M.D., Ray W. Ware, M.D. and
Darrell Dochterman, M.D.

Lexington, Kentucky

Present and future applications of digital computer signal processing to diagnostic medical imaging are discussed.

In spite of certain shortcomings, through the years conventional methods of radiological examination have been very helpful in diagnosing disease. Because the information gained from a conventional radiograph is limited due to the varied densities that are often superimposed on an area under investigation, there has been a constant search for other, more effective methods. The complex technique of body section radiography inevitably evolved (*Bocage,* 1921). Several interchangeable terms were used to denote this technique of examination as it grew in popularity: "laminography" (from lamina, meaning layer), "planigraphy" (from planum, meaning plane), "stratigraphy" (from stratum, meaning layer), and "tomography" (from the Greek tomos, meaning a cut or slice).

Tomography represented a significant advancement in the field of diagnostic radiology in that it permitted dissociation and separate display of the details of complex body structure. In conventional tomography the x-ray tube and the recording film move synchronously in opposite directions during exposure, thereby blurring shadows above and below the plane under investigation. The degree of blurring increases with distance from the plane under investigation and with the length of the arc traveled by the x-ray tube. The longer the arc, the thinner the cut and the smoother the blurring. However, in linear tomography, objects perpendicular to the plane of the section are maximally blurred, while those parallel to the plane are actually only elongated; and so, poor marginal dissociation of blurred planes occurs. Also, according to the law of tangents described by Ziedses des Plantes in 1932, the more tangential rays pass through the object plane, the sharper the delineation. For these reasons, multi-directional circular, elliptical and—finally—hypocycloidal tube motions came into use. As early as the 1940's the desirability of deriving cross section views was recognized. By the 1950's there were attempts in Europe to develop suitable cross section (transverse axial) tomography equipment. However, the images still had to be recorded on and analyzed from radiographic film. The end result was unsatisfactory due to poor definition in lower contrast areas of the body (e.g.: brain and abdomen). Thus, the early versions of transverse tomography were not accepted at that time, and had to wait for a neurologist, Oldendorf, to suggest applying modern means of x-ray detection and registration—superior to film in sensitivity and dynamic range. The reader is probably already familiar with analog methods of improving contrast in roentgenology (and at the same time reducing dose of ionizing radiation) based on video techniques of image amplification and processing which allow adjustment of brightness and contrast.

Conventional tomography has served us well for many years, and no doubt will continue to do so. It does have its limitations, however—especially in low contrast areas, where the human eye has difficulty perceiving minor differences in tissue density. Either a more sensitive observer than the human eye or contrast enhancement of the tissues being studied is needed to increase the diagnostic information gained from tomography. In renal or gallbladder tomography, for example, iodine-containing contrast media are helpful. Yet, because contrast enhancement media cannot be used in every organ or body part, the search for better methods of enhancing image quality has continued.

All soft tissues are composed of organic matter —carbon, nitrogen, hydrogen and oxygen in varying percentages. Bone and teeth also contain substantial quantities of inorganic matter—calcium, phosphate, etc., so that the tissues vary roentgeno-

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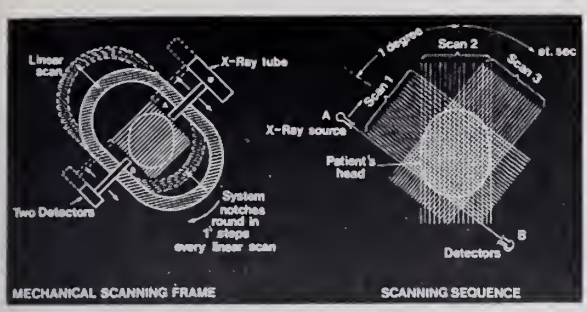


FIG. 1—Diagram demonstrates principle of operation of the EMI and/or similar scanning systems.

graphically, as they differ in atomic composition (atomic number) and density. The influence of density upon absorption coefficient is illustrated by the fact that a layer of solid iron absorbs more radiation than iron powder of the same volume, although the iron in both has the same atomic number. So, it is clear that the x-ray linear absorption coefficient is extremely dependent upon the density of the element. Clever application of the above principles and the use of computer science have resulted in a remarkably successful approach to transverse axial tomography exemplified by the EMI Scanner and other similar devices.

Transverse Axial Tomography

Oldendorf,[24] in his experiments on materials testing in the early 60's, discovered and patented the idea of passing an x-ray beam at successive angles through an object to obtain the absorption coefficient in the rotation center (1961). Cormack,[9] in a remarkable paper (1963), discussed the idea of making measurements of the x-ray transmission "along lines parallel to a large number of different directions." These investigations of absorption coefficient measurements formed the backbone of further research which ultimately found a solution to the transverse axial tomography problem. The result of these studies is the now commercially available EMI Scanner, developed by Godfrey Newbold Hounsfield[16] (1972), and pioneered clinically in England (1972-1973) by Dr. James Ambrose.[4-6] The EMI Scanner was named for the company which subsidized the research and built the first apparatus capable of successfully performing computerized transverse axial tomography (C.T.A.T.). At the same time that the EMI Scanner was developed in England, studies were being carried on at Georgetown University, Washington, D.C. The investigation of Dr. R.S. Ledley[19] and his colleagues at Georgetown University resulted in the development of a **whole body scanner,** the ACTA (automatic computerized transverse axial) (Ledley, *et al,* 1974), whereas the current model EMI Scanner has only one scan path designed for the head. (Newer models are planned to permit whole body scan capability.) ACTA, the recently introduced Ohio Nuclear-Delta Scanner and other **whole body** scanners to come also promise to be helpful in diagnosis of lesions in those regions of the body which are, like the head, difficult to examine by conventional x-ray methods (e.g.: abdomen, retroperitoneum, mediastinum, spinal cord, etc.). However, wide clinical evaluation of production models of these instruments is at this writing not complete. Color image presentation is feasible in C.T.A.T., and has been adopted by ACTA and some other manufacturers. Each color or grey level, represents a specific range of tissue absorption coefficient.

The first EMI Scanner to come to Kentucky was located early in 1975 at St. Joseph Hospital, Lexington. Figures 2 through 8 are examples of scans made on this instrument.

Depending on the instrumentation system used, and the body part under examination (head,

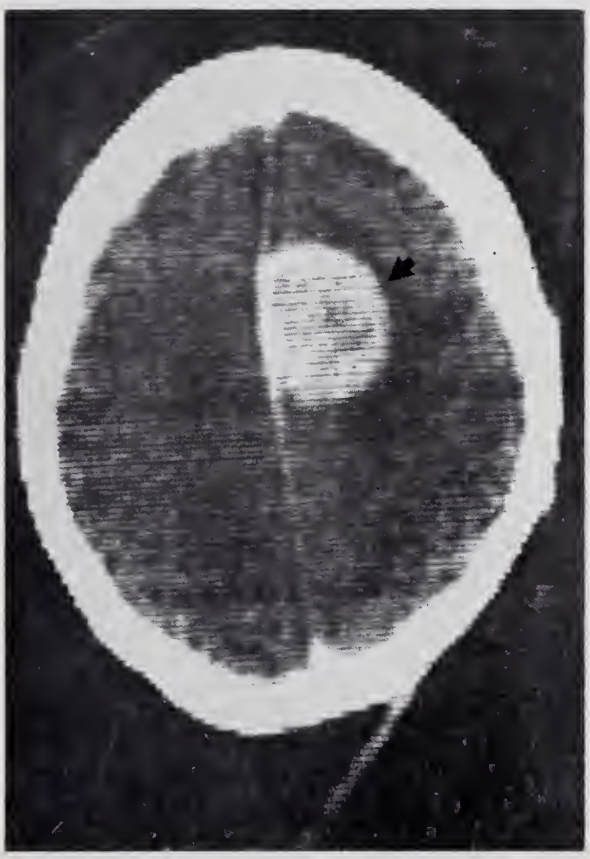


FIG. 2—Parasagittal meningeoma, displacing falx cerebri (opposite to previous beliefs).

abdomen; adult, child; etc.), the x-ray tube used in transverse axial tomography (T.A.T.) has a focal spot of 1.2-1.5 mm and is energized with 100-140 KV at 5-40 mA. As the narrow, collimated x-ray beam scans linearly along one aspect of the body part being examined, a sodium iodide crystal, coupled to a photomultiplier (replacing the radiographic film), moves on the other side of the body parallel to and in the same direction as the x-ray source. In contrast to conventional tomography, no blurring occurs because both x-ray source and detector move in the same direction (Fig. 1). Each x-ray photon passing through the tissue and impinging on the sodium iodide crystal causes a flash of visible light which is intensified by a photomultiplier. The photomultiplier output is sampled by the computer about every five milliseconds, so an x-ray intensity profile is registered in the computer for a given scan pass.

After each scan pass, the tube and the scintillation detector rotate one degree or so stepwise, and another scan begins. This cycle is repeated until sufficient x-ray transmission/absorption data

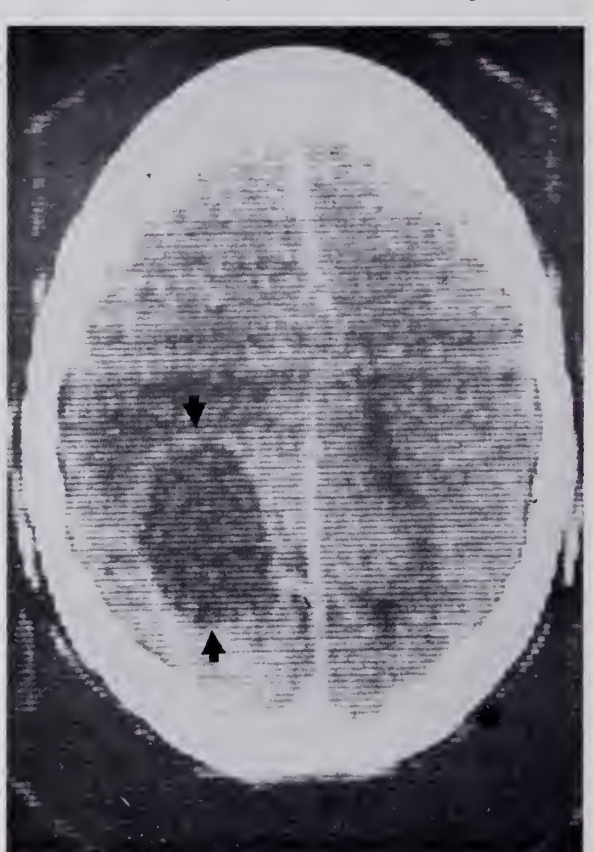


FIG. 3—Oligodendroglioma of the left cerebral hemisphere. (Tumor displaying lower absorption coefficient than surrounding brain tissue.)

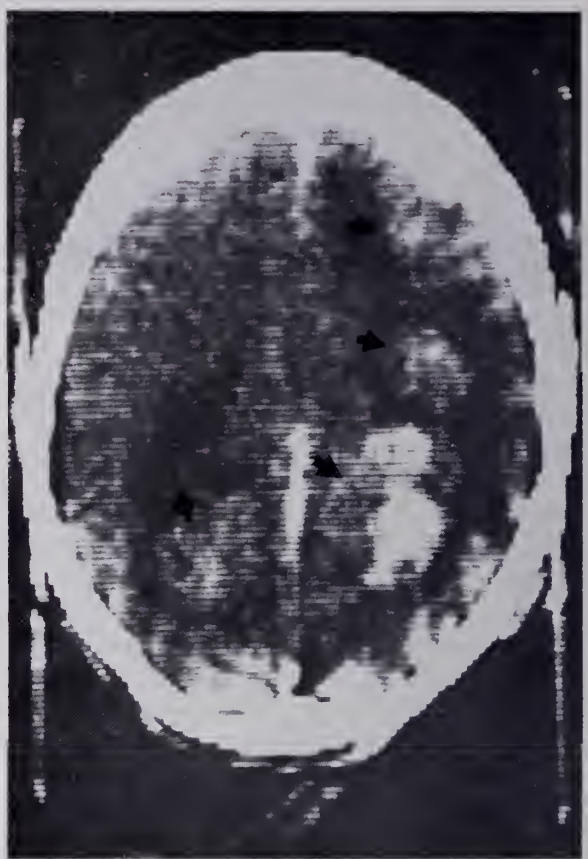


FIG. 4—Brain metastases from lung carcinoma.

are accumulated from many directions through the patient's body. As many as 180 scans (one scan or "view" per degree of angular rotation) may be recorded if desired. Usually, 160 measurements (photon counts) are recorded in the computer during each linear scan pass. Assuming that the highest resolution is desired, 180 scans will be made during 180° rotation about the patient's body. This represents a total of 28,800 (160 × 180) x-ray intensity readings which are fed to the computer for analysis. The computer calculates from 28,800 readings, by means of simultaneous equations, the individual x-ray absorption coefficients for 6400 points (if the 80 × 80 grid-matrix is used)—or for 25,600 points (if 160 × 160 grid-matrix is used). The newer C.T.A.T. scanners are using even finer grid-matrix. The scan plane contains an array of x-ray intensities proportional to the absorption coefficients of multiple tissue points, so that a transmission x-ray intensity map is produced by the different absorption coefficients of the various regions of tissue through which the x-ray travels. The information which results from analysis of the multiple x-ray intensity profiles (scan data) is

synthesized by computer into a composite cross-section image which is remarkably superior to any single x-ray view. This image enhancement is the direct result of the spatial signal averaging implied by forming a composite image from many separate views (scans).

The composite image is displayed on a cathode ray tube (television monitor). It can also be transferred to a video disc or tape, or can be photographed.

It is interesting to note that the image synthesis methods which are fundamental to transverse axial tomography have been considered for application to other medical image modalities. Synthesis of composite image from multiple projections is being attempted or studied for electron microscopy, radionuclide scintigraphy, ultrasonography, etc. In a collaborative effort between scientists at the High Altitude Observatory of the National Center for Atmospheric Research (NCAR) and the United States Air Force School of Aerospace Medicine, Altschuler,[2,3] *et al,* were able to synthesize from multiangular roentgenographic views of a test object, any number of serial tomographic sections at chosen thickness and at any specified orientation. Ordinary radiographs taken at serial angles 1.5° to 3° and digitized by means of microdensitometry were processed by a computer program originally devised at NCAR to study the corona of the sun. This research expands the concept of transverse axial tomographic imaging to multiple plane image reconstruction whereas the present C.T.A.T. is limited to single plane imaging. This may have broad applicability in medical imaging of all kinds if it proves technologically feasible.

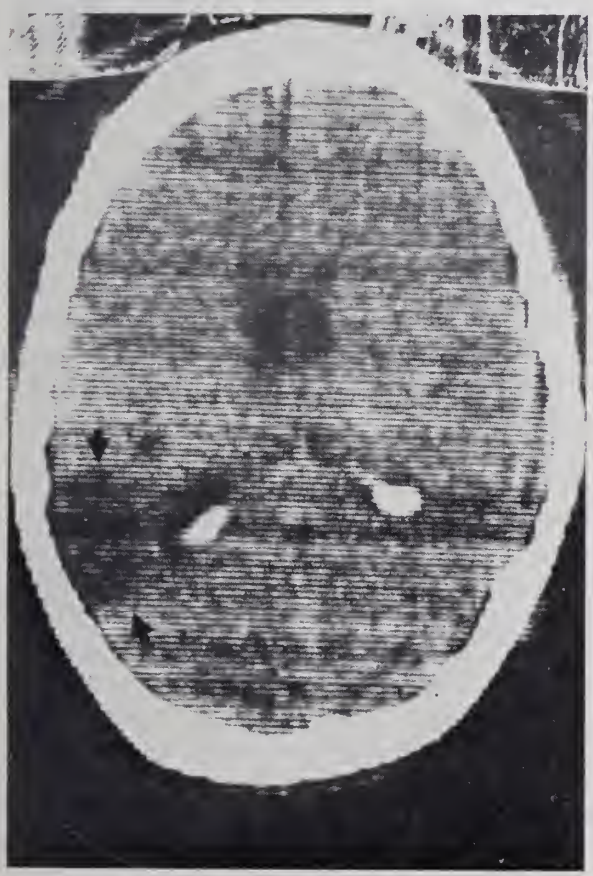


FIG. 5—Brain infarct. (Angiography revealed rather marked arterio-sclerotic disease of the left internal carotid.)

Discussion

Computer image synthesis considerably enhances contrast and definition of minute differences in tissue density, whereas in conventional tomography, only major differences in tissue density are discernible. For example, computerized tomography demonstrates that the absorption coefficients of brain tissue and cerebral spinal fluid differ by approximately 4%. This percentage is not sufficient for adequate perception by the unaided human eye from conventional radiograms, but the computerized methods of image synthesis permit density resolution as good as 0.5%. In computerized tomography, as in conventional tomography, differences in tissue densities can also be augmented by the introduction of a medium translucent or opaque to x-ray.[17] Further refinement of computerized tomography may enable us, after sufficient information is accumulated, not only to differentiate between soft tissue types (muscle, fibrous tissue, tendon, effusion, etc.), but, perhaps, also to identify the histology according to absorption coefficients, even though particular types of lesions (tumor, cyst, etc.) may vary only slightly. Thus, the advent of computerized transverse axial tomography has added new dimensions to diagnostic radiology, the total impact of which is at present difficult to predict. In the field of neuro-diagnosis, the introduction of the EMI Scanner would seem to be an advancement that equals or surpasses the introduction of pneumoencephalography by Walter Dandy in 1919, or of cerebral angiography by Egas Moniz and his associates in 1927.

The clinical and technical advantages of computerized transverse axial tomography: (1) The diagnostic accuracy is high. The Mayo Clinic, with two years of experience, reported only 4-5% failure rate in diagnosis of head lesions.[7] The ac-

curacy of pneumoencephalography and angiography is also high, but the connected morbidity is making these procedures—especially pneumoencephalography—unpopular now that non-invasive methods are available. Of course, angiography's ability to delineate the vascular bed means that it will still be required in many instances—especially when surgical procedures are contemplated; its use will probably be little altered, while pneumoencephalography will be abandoned in the majority of cases. (2) As mentioned, C.T.A.T. is completely non-invasive, subjecting the patient to no hazard or discomfort, and can therefore, be performed on out-patients as well as on in-patients. Isotope scanning is also non-invasive, and is widely used today on in-patients and out-patients alike, though its percentage of false negative and false positive results is much greater. As yet, it is difficult to predict the influence C.T.A.T. will have on ultrasonic echography, another non-invasive procedure which has shown much progress in the last few years. Will it stimulate further development of echography? Vice-versa? Or, will they complement each other? Whatever the case, it is already known that echography can, in no way, match the diagnostic accuracy of C.T.A.T. in head examinations. (3) The radiation dose per study (especially the volume dose to the patient) is smaller. C.T.A.T. exposes to radiation only the plane under investigation, whereas the conventional skull x-ray exposes the entire head or area under investigation. It should be noted that the information gained from the conventional skull x-ray pertains more to the condition of the bony calvarium, while very little direct information can be derived concerning brain lesion or disease. (4) The anatomy is displayed with better depth perception and spatial orientation. (5) The trained technologist is capable of performing the computerized examination, whereas a well-trained physician is required in performing angiography or pneumoencephalography. (6) Since C.T.A.T. is non-invasive and is essentially free of morbidity, it can be used more often as a follow-up to surgical procedures (head surgery, cardiac surgery, etc.) and can be offered to the poor risk patient who cannot be subjected to more invasive methods of study. There is no doubt that many patients in mental institutions who have not been subjected to angiography and/or pneumoencephalography for one or more of the above reasons, could easily be examined with computerized transverse axial tomography, and some of these would be found to have surgically treatable neurological lesions. So, the C.T.A.T. studies will come to be the examination of choice in many instances.

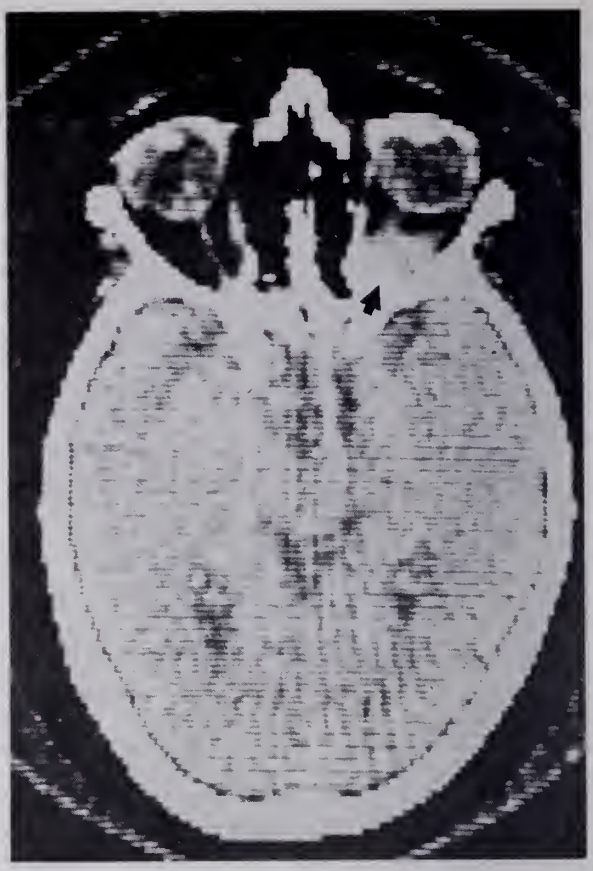


FIG. 6—Retro-orbital fibrous pseudotumor. (Patient experienced chronic visual disturbances which ended with sudden onset of cranial nerve palsies.)

The present clinical and technical shortcomings of computerized examinations: (1) At present, the cost is still high—$250 to $300 per exam—primarily due to the high cost of equipment. (2) Body motion (skeletal, cardiorespiratory, peristaltic, etc.) during present lengthy scans is a problem; however, many manufacturers have announced drastic reductions in scan time for forthcoming models. (3) Some early versions require an equilibrating material (water), because of the difficulty in reconstruction of images by computer along sharp boundaries where gross differences in linear absorption coefficients exist, as is encountered at the air/tissue interface. A water bag is used to exclude air from the x-ray path. Water, having a similar absorption coefficient to that of tissue, prevents excessive counting rate fluctuation, and assures more uniform statistics. The computer algorithms now used in whole body C.T.A.T.



FIG. 7—Cortical brain atrophy. (Scan shows increased distance between gyri.)

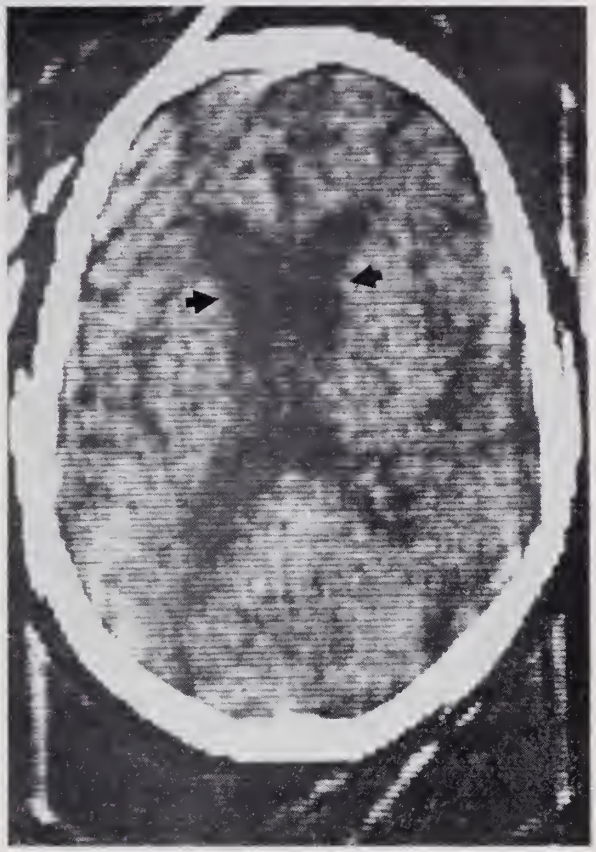


FIG. 8—Cerebral atrophy. (Scan shows enlarged cerebral ventricles with loss of brain substance.)

have to a large extent solved this problem. (4) The intensity of research and development in this field may imply rather rapid obsolescence of earlier designs, suggesting the importance of the manufacturer's willingness to update equipment for a reasonable period, as technology develops. (5) Space allocation is a problem in many already-existing x-ray departments and hospitals since space for C.T.A.T. was not foreseen. (6) Service problems are anticipated (until trained personnel can be placed in the field). Naturally, the solution to this problem will also come about once C.T.A.T. equipment becomes more widely used. (7) Distribution and placement (of C.T.A.T. instruments) in England are controlled administratively by the government and the same controls are being exercised by health care agencies in the United States. As time goes on, however, it will become more obvious that this equipment is a very important addition to our diagnostic armamentarium since it simplifies the examination for both patients and physicians while improving diagnostic information. **At this time,** most of the major x-ray equipment manufacturers and many newly formed companies appear to foresee a bright future for C.T.A.T. since they are heavily engaged in development and production of such equipment. Within two to three years, the distribution control bodies will probably be dissolved and equipment will be freely available. As competition develops, some price reduction can be expected. **Every major hospital will soon require computerized tomographic facilities.**

Summary

Computerized transverse axial tomography has added new dimensions to the field of diagnostic radiology. To date, its contributions have been invaluable in the diagnosis of head lesions—particularly of head trauma (subdural and epidural hematomas), intra-cranial space-occupying lesions (tumor, cyst, abscess, etc.), hydrocephalus, stroke, vascular malformations, aneurysms with hematomas and orbital and retro-orbital pathology. C.T.A.T. also is an effective method in evaluation of patients with periodic severe headaches, seizures and mental disorders where underlying organic brain disease or mass lesion is to be excluded. Whole body scanning is no longer a concept of the future; in fact, clinical evaluation of

several whole body scanners is presently underway. Thus, it seems inevitable that, in years to come, computerized transverse axial tomography will affect some aspects of every medical specialty. Diagnostic radiology in the period of the 60's and early 70's was marked by the vigorous growth and development of angiography. Today it appears that computerized transverse axial tomography will dominate the next decade. There is no doubt that the EMI, ACTA, Delta Scanners and their "cousins", yet to come, represent only the beginning of a great new field of diagnostic imaging. Thus, every physician should be versed in this new diagnostic method.

Neither advantages nor limitations of computerized tomography are yet completely known. Future clinical use will disclose them and will put them in true perspective. Suffice it to say that experience to date is very encouraging.

Acknowledgment

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GRAND ROUNDS

The University of Kentucky College of Medicine

This Journal feature will be presented alternately by the University of Louisville and the University of Kentucky Departments of Medicine and Departments of Surgery. We hope to have these features revolve around subjects of immediate practical interest to the practicing physician; and, for those of us not able to attend grand rounds in the teaching centers as often as we might, we hope this will represent a bit of a refresher course.

Pseudomonas Endocarditis in A Heroin Addict*

A case of *Pseudomonas* endocarditis in a heroin addict is presented. Discussion includes the changing spectrum of endocarditis, pathogenesis of infective endocarditis, current medical and surgical management and new diagnostic modalities.

Introduction

In the past several years, infective endocarditis has undergone changes in the spectrum of presentations and organisms. Recently a heroin addict in our medical center with *Pseudomonas* endocarditis prompted us to review the literature and to present him in conference.

Case Report

A 36-year-old black male heroin addict was admitted to the Lexington VA Hospital because of *Pseudomonas* bacteremia and a new murmur of aortic incompetence. He had a nine-year history of parenteral drug abuse, but had otherwise been in good health. His last drug usage was alleged to have been an unsuccessful attempt to intravenously inject pentazocine (Talwin) two months prior to the onset of his symptoms. Nine days before admission to the VA, he developed pains in his left shoulder and hip. The next day he experienced the abrupt onset of headache, chills and abdominal cramping, and his temperature rapidly rose to 104°F. Painful erythematous and slightly swollen 1 cm lesions developed acutely on the plantar surface of his right big toe and foot, and his left wrist became swollen and painful. His white cell count was 17,600 with a left shift. *Pseudomonas aeruginosa* was cultured from his blood and he was begun on intramuscular gentamicin therapy. On the 8th day of his illness, a new murmur of aortic incompetence was noted. He was given intravenous carbenicillin and was transferred to the Lexington VA Hospital. On admission he had a fever of 100°F and a blood pressure of 120/40. The pertinent physical findings included: painful erythematous slightly indurated 1 cm skin lesions on the sole of his left foot, a new murmur and collapsing pulses of aortic incompetence, and an Austin Flint rumble. There was no evidence of congestive heart failure, the spleen was not palpable, and the optic fundi were normal. Other findings included: an x-ray demonstrating minimal upper lobe venous congestion in the lungs and a borderline enlarged heart and an echocardiogram demonstrating premature closure of the mitral valve. Hematuria was present. His hospital course was characterized by hectic fevers and intermittent bacteremia despite the administration of carbenicillin up to 50 gms per day and gentamicin therapy up to 7 mg/kg/day. Schlicter tests showed no bactericidal levels of the antibiotic in undiluted serum one hour after injection of both drugs. The gentamicin and carbenicillin were discontinued and he was started on tobramycin and ticarcillin, but before his response to this regimen could be evaluated, he developed an intracerebral hemorrhage from a mycotic aneurysm and died on the 20th hospital day.

The Changing Spectrum of Infective Endocarditis

The term "infective endocarditis" includes chronic, subacute and acute presentations of bacterial, fungal and rickettsial etiologies. In 1909, Horder wrote a classic paper on infective endocarditis,[1] emphasizing the subacute or chronic form of the disease. This paper and other pre-antibiotic publications established that approximately 90% of all cases of infective endocarditis then seen were of the subacute variety; that is, indolent infections usually caused by viridans streptococci on valves previously damaged by rheumatic fever. In the years since the development of antibiotics, there has been a shift in the spectrum of clinical presentations and etiologic organisms. Weinstein and Ruben, in their extensive 1973 review,[2] detailed aspects of the shift: (a) involvement in a larger percentage of older individuals (mean age now around 50 years); (b)

**From the Division of Infectious Diseases, Department of Medicine, University of Kentucky College of Medicine, Lexington. Grand Rounds held August 20, 1975.*

decreasing frequency of involvement of rheumatic valves, and increasing involvement of normal valves or those affected by degenerative diseases; (c) decreasing incidence of subacute endocarditis to around 55% in recent years, with a coincident increasing incidence of acute bacterial endocarditis; (d) decreasing frequency of viridans streptococci as an etiologic agent in cases of subacute endocarditis so that it is the etiologic organism in only 40% of all cases of infective endocarditis; (e) an increasing frequency of enterococcal endocarditis to about 10%, and staphylococcus to about 20% of all cases (the latter makes up more than 50% of acute endocarditis cases); (f) an increasing frequency of recognition of a variety of organisms including enteric gram negative bacilli, anaerobes, fungi and rickettsi.

A variety of causes are felt to contribute to these shifts. Antibiotic treatment of streptococcal diseases may be reducing the frequency of rheumatic valvulitis. Early antibiotic treatment of undiagnosed febrile diseases may abort some cases of SBE. Nosocomial bacteremias related to intravenous therapy and valvular replacements with prostheses are new sources of patients with endocarditis caused by staphylococci and a variety of other organisms. Parenteral drug abuse makes a minor contribution, depending on the patient population studied.

Pathogenesis of Endocarditis

The classification of infective endocarditis into subacute and acute forms is arbitrary and may be inappropriate because the syndrome may not be typical for the microorganism that causes it.[3] We are coming to realize that many microorganisms that can cause acute bacterial endocarditis may also cause a subacute form of the disease. The pathoanatomic and pathophysiologic processes of subacute bacterial endocarditis are different from those of acute bacterial endocarditis.[4] Four mechanisms are responsible for the initiation and localization of subacute bacterial endocarditis: (1) a previously damaged heart valve or a hemodynamic situation producing a jet effect, (2) a sterile platelet-fibrin thrombus, (3) bacteremia, often transient, and (4) a high titer of agglutinating antibody for the infecting organism. The hemodynamic situation producing a jet effect was illustrated in our patient with *Pseudomonas* endocarditis. Due to venturi effect, the characteristic location of fibrin thrombi is distal to the site of obstruction.[5] In aortic valvular disease, the lesion occurs on the ventricular side of the aortic valve leaflets. The high velocity jet stream of blood through the incompetent aortic valve may also produce lesions on the chordae tendinaea of the aortic leaflet of the mitral valve. In other situations, the jet stream of high velocity blood exposes collagen tissue, and platelet disposition occurs in a manner analogous to the formation of the primary platelet plug of normal hemostasis after vascular injury. The sterile platelet-fibrin thrombus then provides a site for implantation of bacteria which appear in the blood stream during a variety of situations including dental manipulation,[6] genitourinary procedures,[7] barium enema,[8] sigmoidoscopy and fiberoptic endoscopy.[9] Transient bacteremias occur frequently even in normal persons and are usually clinically unimportant, even with sterile platelet-fibrin thrombi situated on the heart valves. Usually the bacteria are small in number and have a low invasive capacity. However, a high titer of agglutinating antibody for infective organisms permits bacteria to clump, and therefore permits large numbers of bacteria to adher to the platelet-fibrin thrombus.[4]

The pathoanatomic mechanism involved in the development of acute bacterial endocarditis is somewhat different. Since 50-60% of cases of acute bacterial endocarditis occur in previously normal heart valves, the sterile platelet-fibrin thrombus may not be required to initiate the process. The organisms involved in this disease are usually highly invasive, such as *Staphylococcus aureus,* and only small numbers are required to establish infection. Thus, the critical requirements in the pathogenesis of acute bacterial endocarditis appear to be bacteremia and an invasive organism.[4] In acute bacterial endocarditis the inducing bacteremia usually originates in an active infection, often at a site remote from the heart.

What then is the pathophysiologic mechanism involved in endocarditis in heroin addicts? The organisms in the genus *Pseudomonas* are mostly free living bacteria which are widely distributed in soil and water.[10] The most important pathogen, *Pseudomonas aeruginosa,* has assumed an increasing significance in recent years as a pathogen in the compromised host. Ordinarily, *Pseudomonas aeruginosa* is of low virulence and is a resident of the intestinal tract in about 10% of healthy individuals.[10] It is also found sporadically in moist areas of the human skin and in saliva. Its nutritional requirements are simple and it can metabolize in any moist environment containing even trace amounts of organic compounds, such as distilled water, hospital soap containers and in-

halation therapy equipment.[10,11] Since 1969, *Pseudomonas aeruginosa* has emerged as an important pathogen in endocarditis in drug addicts. Reyes[12] and his group tried to locate the source of *Pseudomonas* organisms that were infecting their heroin-addicted population. Contraband heroin confiscated in Detroit did not regularly yield *Pseudomonas* on culture, nor did tap water in the Detroit Medical Center Hospital. Narcotics are routinely diluted locally with lactose, quinidine and other drugs, and this may possibly be a source of the *Pseudomonas* although it has not been documented. The direct i.v. injection of grossly contaminated materials may introduce a large bacterial inoculum which is capable of infecting the heart valve. Foreign materials mixed with heroin may cause sub-endothelial injury which can be followed by fibrosis of the valve leaflets. Such fibrotic changes were seen in five out of 23 cases.[12] It is evident that the tricuspid valve is maximally exposed to both trauma and bacteria in direct i.v. injection. It is claimed that *Pseudomonas* implants on normal as well as abnormal valves.[13] However, the most likely mechanism seems to be a combination of a large inoculum of *Pseudomonas aeruginosa* and a previously damaged heart valve.

Archer and others[14] postulate that *Pseudomonas* endocarditis may superinfect heart valves previously damaged by more virulent organisms such as *Staphylococcus aureus.* "Mixed" endocarditis with the staphylococcus and *Pseudomonas* has been previously found in patients with burns and other debilitating illnesses. There were four cases of "mixed" endocarditis in the series of Reyes and evidence was presented that an initially quiescent *Pseudomonas* infection became manifest after the inoculum of staphylococcus was lowered by drug therapy.[12] The clinical lesson learned from this is that a "mixed" endocarditis with gram negative organisms should be suspected when hectic fever continues during adequate therapy of a *Staphylococcus aureus* endocarditis in someone suspected of drug abuse.

A variety of complications have been reported with infective endocarditis in heroin addicts.[12-15] Among these are cardiac failure, upper GI bleeding, empyema and, with *Staphylococcus aureus,* septic joints and renal failure. Central nervous system complications include hemiparesis, meningitis, brain abscesses and cerebral infarction. The frequent tricuspid valve involvement results in septic pulmonary infarcts which may present as pneumonia clinically. Emboli to larger arteries is a striking clinical finding in fungal endocarditis. The large emboli are attributed to large vegetations on the cardiac wall. In the series of cases of *Pseudomonas* endocarditis from Detroit,[12] the femoral artery was occluded twice and the right middle cerebral artery once. Both patients had large vegetations of the left atrial endocardium.

Difficulties in the management of patients with *Pseudomonas* endocarditis have been emphasized.[12,13] Persistent bacteremia without fever was seen in two patients in the Detroit series. As mentioned earlier, *Staphylococcus aureus* may be the initial pathogen appearing in blood cultures, with *Pseudomonas* appearing after several weeks of hospitalization. In five of 13 patients with pure tricuspid endocarditis, murmurs of tricuspid insufficiency were not heard on admission, and the diagnosis was suspected because of fever, persistent bacteremia, and pulmonary emboli.[12] It is well established that bacterial endocarditis may occur in the absence of a heart murmur,[3] and frequently heart murmurs will appear during hospitalization, even in the face of adequate antimicrobial therapy. Cardiac catheterization may not demonstrate tricuspid insufficiency, even though Pseudomonads infecting the tricuspid valve are later demonstrated at surgery or autopsy.[12]

Mortality is high in spite of vigorous medical or surgical management. Medical management alone is associated with a 56% success rate.[12] This is slightly misleading, however, since many patients undergo surgery because of failure of antimicrobial therapy. No single antimicrobial regimen is uniformly successful in *Pseudomonas* endocarditis. A single anti-*Pseudomonas* agent such as carbenicillin, gentamicin, polymyxin B or tobramycin cannot clear the blood stream in *Pseudomonas* endocarditis.[12] The level of aminoglycoside antibiotic is critical, since combinations including carbenicillin up to 60 gms/day have failed.[13]

The efficacy of the antibiotic therapy in patients with endocarditis is commonly assessed by means of the Schlicter test.[16] This test is performed by mixing the infecting organism with dilutions of serum from the patient receiving antibiotics. The test was described for patients with endocarditis caused by gram positive organisms and little has been written about its validity or limitations.

Bryan, *et al,* recently published evidence that although the serum bactericidal test was useful in

the management of patients with gram negative endocarditis, there were factors that might give misleading results.[17] One of these is the tendency of serum to become alkaline on standing. The activity of aminoglycoside antibiotics such as gentamicin is pH dependent. For example, gentamicin is approximately 100 times as active *in vitro* at pH 8.5 than at pH 5.0. A second factor is the complement-dependent bactericidal system of serum which is lethal to many strains of gram negative bacilli by causing injury to the cell wall. An additive or synergistic interaction of the complement-dependent bactericidal system of serum was found with the eight antibiotics studied. There is some evidence that the best correlation with a favorable outcome in gram-negative infections other than endocarditis occurs when bacterio**static** activity is greater than 1:8 in serum samples obtained one hour after the administration of antibiotics (peak titers).[18] This criterion is identical to the one used by Bryan with the exception that bacteri**cidal** rather than bacterio**static** titers are preferred in the management of endocarditis.

Surgery has played an increasingly important role in the management of patients with bacterial endocarditis over the past decade. The usual indications for surgical intervention are failure of antibiotic therapy or congestive heart failure. The need for valve replacement in the event of intractable heart failure at any point in the course of endocarditis has been emphasized.[19] Alternatively, Griffin, Jones and Cobbs[20] recommend early valve replacement in patients with only mild heart failure and aortic insufficiency because of a later significant risk of sudden death from embolic myocardial infarction or arrhythmias. In the Detroit series of patients with *Pseudomonas* endocarditis, the results with surgery were only 46% successful.[12] However, in this group the results of surgery for right-sided endocarditis alone were 75% (6/8) successful, encouraging them to recommend valvular ablation for intractable endocarditis of the tricuspid valve.[12]

Recently the clinical picture of acute aortic regurgitation in the presence of bacterial endocarditis has been delineated.[21,22] While there is striking absence of the signs of a wide pulse pressure and a large heart, as seen in chronic aortic regurgitation, the following features are present in acute aortic regurgitation: (1) aortic systolic ejection murmur with a decrescendo diastolic murmur usually ending in mid-diastole, (2) an Austin Flint murmur audible at the apex, (3) absence of soft first heart sound, and (4) pulmonary vascular engorgement in the presence of a mild to moderately enlarged heart without dilatation of the aortic root. In addition, some of the patients in that series had abnormalities of atrial-ventricular conduction.

There also is a characteristic combined echocardiographic and phonocardiographic picture which is diagnostic of bacterial endocarditis in some cases.[21] Endocarditis is manifested by distinctive, thickened, irregular aortic leaflet echos with normal systolic excursion and mitral echo preclosure with anterior leaflet fluttering. The mitral pre-closure results in a mid- or end-diastolic crescendo murmur accompanied by a soft first heart sound. The specific echophonographic findings of aortic regurgitation due to endocarditis may enable diagnosis of this condition in the absence of positive blood cultures. However, not all cases of bacterial endocarditis present this characteristic pattern.

In addition, the hemodynamic severity of acute regurgitation due to infective endocarditis can be also assessed by echocardiography.[22] Echocardiography shows premature closure of the mitral valve in all patients, and the greater the regurgitant flow through the diseased aortic valve, the earlier the mitral valve closes. Those patients with echo signs of very early mitral valve closure have severely volume-overloaded ventricles and are candidates for early valve replacement. One reason for emphasis on early valve replacement, aside from the risk of sudden death mentioned above, is that eradication of infection is much more difficult in the failing heart.[3]

Our patient's acute course was typical of *Pseudomonas aeruginosa* endocarditis, although many cases may have a more subacute presentation. The inability to obtain any bactericidal activity in the serum or to control bacteremia with high doses of carbenicillin and gentamicin is also unfortunately characteristic. We are unable to report on the efficacy of tobramycin and ticarcillin in this patient since he died before we could make this assessment.

Acknowledgements

Our thanks to Mrs Catherine E. Fine for help in preparation of the manuscript.

Robert M. Cooper, M.D.
Richard P. Leach, Jr., M.D.
Robert C. Noble, M.D.

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Formula for Health
H = DPm + g + i + p + DDm + DTm

POLITICAL conventions and election time being just a few short months away, candidates are flooding us with their views and programs for improved health care for the country. While little criticism can be made of the intent and objectives of many programs, their methods of implementation leave much to be desired, and the thrust of the program may be mal-directed.

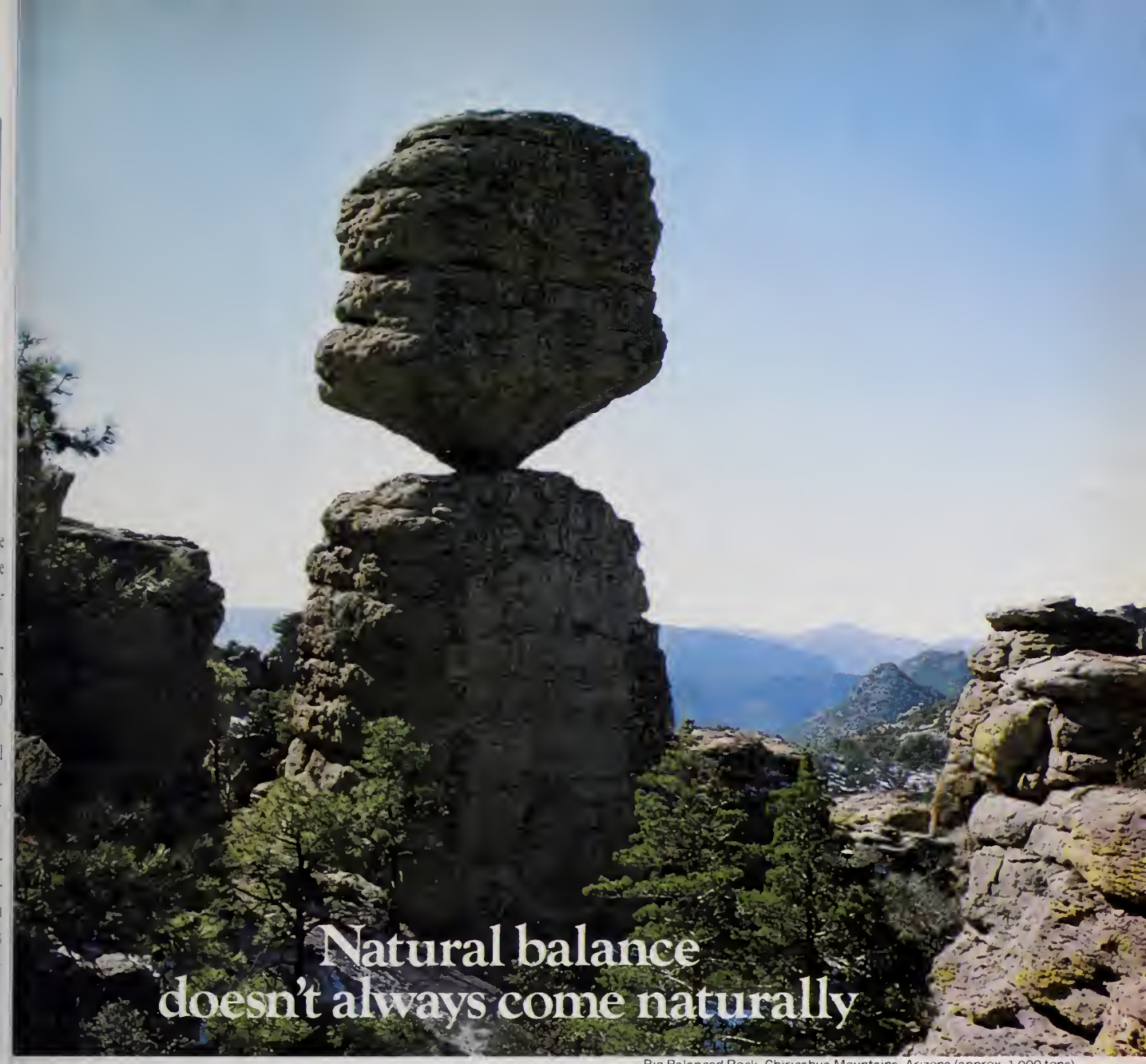
A simplified overview of health demands a threefold approach: disease prevention, disease detection, disease treatment. Failure of a positive approach in any one of the three areas will prove unsatisfactory and self-defeating. This is particularly evident if due consideration in any program fails to emphasize disease prevention.

While detection and treatment in the final analysis remain essentially the purview of the medical profession as we understand its role today, disease prevention is in large part an extra-medical matter. Maintenance of health is in great part a personal responsibility, a responsibility of industry and a responsibility of government.

Consider some of the major killing diseases of this society—coronary heart disease, alcoholic cirrhosis, carcinoma of the lung. Present knowledge regarding these diseases indicates that they are basically preventable, readily diagnosed, variably ameliorated, occasionally cured. No amount of legislation and monies directed to detection and treatment is likely to eliminate them. The total problem demands prevention—meaning medical research to better understand the genesis of the disease—but more important, personal awareness of and refrainment from habits that are causal.

In this society where personal liberty is regarded as inviolate, any legislation designed to interfere with liberty is suspect—witness prohibition legislation. Legislation designed, however, to improve the quality of life, e.g. effective air and water pollution control, improvement of nutrition and consumer education regarding personal health habits, deserves highest priority in any candidate platform.

GRS



Big Balanced Rock, Chiricahua Mountains, Arizona (approx 1,000 tons)

nd useful in the management of vertigo* associated with
es affecting the vestibular system.
relieve nausea and vomiting often associated with vertigo:*
al adult dosage for Antivert/25 for vertigo:* one tablet t.i.d.
) available as Antivert (meclizine HCl) 12.5 mg. scored
, for dosage convenience and flexibility.
ivert/25 (meclizine HCl) 25 mg. *Chewable* Tablets for
, vomiting and dizziness associated with motion sickness.

UMMARY OF PRESCRIBING INFORMATION

ICATIONS. Based on a review of this drug by the National Academy of
es—National Research Council and/or other information, FDA has classified
dications as follows:
ective: Management of nausea and vomiting and dizziness associated with
n sickness.
sibly *Effective*: Management of vertigo associated with diseases affecting the
ular system.
al classification of the less than effective indications requires further
tigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported

More detailed professional information available on request.

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Serum K^+ and BUN should be checked periodically. (See Warnings Section.)



Before prescribing, see complete prescribing information in SK&F literature or *PDR*. The following is a brief summary.

* **Warning**
This fixed combination drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

***Indications:** *Edema:* That associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. *Mild to moderate hypertension:* Usefulness of the triamterene component is limited to its potassium-sparing effect.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: **Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired.** Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematolog studies in cirrhotics with splenomegaly. An hypertensive effects may be enhanced in po sympathectomy patients. The following m occur: hyperuricemia and gout, reversible nitrog retention, decreasing alkali reserve with possit metabolic acidosis, hyperglycemia and glycosu (diabetic insulin requirements may be alterec digitalis intoxication (in hypokalemia). U cautiously in surgical patients. Concomitant u with antihypertensive agents may result in . additive hypotensive effect. 'Dyazide' interfer with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weaknes dizziness, headache, dry mouth; anaphylax rash, urticaria, photosensitivity, purpura, oth dermatological conditions; nausea and vomiti (may indicate electrolyte imbalance), diarrhe constipation, other gastrointestinal disturbanc Necrotizing vasculitis, paresthesias, icteru pancreatitis, xanthopsia and, rarely, aller pneumonitis have occurred with thiazides alor

Supplied: Bottles of 100 capsules; in Single U Packages of 100 (intended for institutional u only).

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SPECIAL ARTICLES

NATIONAL POISON PREVENTION WEEK, MARCH 21-27, 1976

The Poison Control Center—What and Why

MARY A. SMITH, M.D.*

ACCIDENTS, including poisoning, are the leading causes of fatalities and disabilities in children less than five years of age. Saddest of all, is that most of these incidents occur in the home and could be prevented with education of the parents and ordinary safety precautions.

The purpose of National Poison Prevention Week is to focus attention on this most serious problem and to increase public awareness.[1]

Poison Control Centers were first established in 1953 as a joint endeavor of the Public Health Service and the American Academy of Pediatrics.[2] These centers were to maintain up-to-date information and provide easy availability for the physician. In 1957 the National Clearing House for Poison Control Centers was established to collect valuable information and provide each center with updating of their files. It was for education, exchange of information and research on prevention and treatment and coordination.

There are now over 500 poison centers in the United States and 12 in Kentucky. Many of them have full-time staff with treatment within their area. Some of the more sophisticated centers in large cities do extensive record-keeping and follow-up. The information they gather can be of great importance to the remainder of the country.

Other centers are located in pharmacies or doctors' offices and manned by volunteer workers.

The Poison Center in Louisville, Kentucky, was begun in the University of Louisville Department of Pediatrics in late 1953 or 1954 and was one of the first in the country. After three or four years of service, the center was placed in the Children's Hospital Emergency Room so that it could be manned by Pediatric Housestaff on a 24-hour basis, seven days a week. The center acts as an information service for the physician and the public and is essential in training the Pediatric Housestaff, since 85 to 90% of all ingestions occur in small children.

Just recently the Poison Control Center in Louisville, Norton-Children's Hospital, Phone 589-8222, obtained a Poisondex System through a generous grant from the WHAS Crusade for Children. With the purchase of this system, which consists of microfilm and its viewer, we have a method for retaining large amounts of information in a small area, and of having the files updated and improved every three months. The Louisville General Hospital has also purchased the Poisondex which is very important to a major teaching hospital which deals with many overdoses in the older population.

The National Clearing House, through its work in education, legislation, research and engineering has made a marked contribution to the decline in morbidity and mortality of the small child.

Statistics show a 31% drop in mortality in 1973 over the year 1972. This is particularly significant because the first safety packaging regulations took effect in late 1972. Death from accidental ingestion of salicylates in children under five years showed an even more drastic drop of 43.5% in 1973.[3]

It is important for all physicians who care for small children to remember the dangers of poisoning by ingestion. Education is of prime importance and National Poison Prevention Week is a good time to start.

*Associate Clinical Professor of Pediatrics, Director, Poison Control Center, Norton-Children's Hospital, Louisville

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KENTUCKY POISON CONTROL CENTERS

ASHLAND: King's Daughter's Hospital, 2201 Lexington Avenue, Harry Phaff, R. Ph., 606-325-4461, Ext. 291, After 5:00 p.m. Ext. 230.

BEREA: Porter Moore Drug Company, Farrell Richardson, R. Ph., 606-985-3061, After 6:00 p.m., 986-8295 or 986-3784.

FORT THOMAS: St. Luke's Hospital, 85 North Grand Avenue, Paul J. Vaal, R. Ph., 606-441-6100, Ext. 372.

LEXINGTON: Central Baptist Hospital, 1740 S. Limestone Street, Carl Beck, R. Ph., 606-278-3411, Ext. 220.

LOUISVILLE: Children's Hospital, Department of Pediatrics, 200 E. Chestnut St., M. A. Smith, M.D., 502-582-1831, Ext. 290.

MURRAY: Murray-Calloway County Hospital, Willard Alls, 502-753-5131.

OWENSBORO: Owensboro-Daviess Co. Hospital, Billy W. McKnight, R. Ph., 502-683-3511, Ext. 75, After 8:00 p.m., Ext. 32.

PADUCAH: Western Baptist Hospital, 2501 Kentucky Avenue, Victor C. Wallace, R. Ph., 502-444-6361, Ext. 221, After 8:00 p.m., Ext. 234.

PAINTSVILLE: Paintsville Hospital Pharmacy, John K. Denton, R. Ph., Day—606-789-5368, Night—789-3724.

PIKEVILLE: Methodist Hospital, Alford Brooks, 606-437-6211, Night—606-437-6593.

PRESTONSBURG: Prestonsburg General Hospital, Prestonsburg, Kentucky, Ronald Johnson, R. Ph., 606-886-2310.

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MATERNAL MORTALITY



From the Files of the KMA Maternal Mortality Study Committee

—Edited by John W. Greene, Jr., M.D.

Case 11-74: This 21-year-old, married, white Gravida 2, Para 1, was first seen September 13, 1973, by a private physician with her current pregnancy. Her last menstrual period was May 19, 1973. She weighed 197 lbs, BP 122/80 and was Rh positive.

The information obtained regarding her first delivery in 1972 was of interest. She was admitted at 5 p.m. to a 120-bed hospital in labor at term. The contractions were every 4-5 minutes and the "cervix was 2 cm dilated, 75% effaced with the presenting part high." She received 1 cc of Hydroxyzine Hydrochloride intramuscularly on admission and 50 mg of Alphaprodine Hydrochloride intramuscularly at 7 p.m. She attained 6 cm dilation at 3:15 a.m. on the 11th of September. The presenting part remained high with the membranes bulging. At 8:15 a.m. the dilation remained the same, the head at "mid station," membranes bulging. An x-ray of the abdomen confirmed the cephalic presentation, LOT. There was no evidence of any cephalopelvic disproportion. Her membranes were not artificially ruptured. She was delivered by Cesarean section at 11:09 a.m. of an 8 lb girl. The postoperative temperature was 100.2 on the second postoperative day. She received Tetracycline HCL intravenously and then received it orally, 250 mg. Q.I.D. She was discharged September 16, 1973, afebrile.

With the present pregnancy, the patient was told by her physician that she should be seen monthly. She was not seen after the first visit until the day of admission to the same hospital at 2:58 a.m. on January 13, 1974. On admission she had a tender abdomen. She was shocky, blood pressure was 70/50, pulse 120 and respiration 25. Her sclera were markedly pale. The uterus was 10 cm (five fingers) above the umbilicus and tender to palpitation. The cervix was thick and closed.

Hematocrit was 19; Hemoglobin 5.9; Urinalysis 1+ albumin. She was typed and cross-matched for blood. The patient was felt to be in labor with probably a ruptured uterus. Dextran was started intravenously at 3 a.m. when the laboratory work was drawn. The second Dextran 40 mg was started at 3:50 a.m. Her blood pressure was now 120/50, FHT 160 in the lower left quadrant. A number 16 Foley catheter was inserted and 25 cc of concentrated urine was obtained.

The first unit of blood was started at 4:30 a.m. She received 50 mg of Diphenhydramine Hydrochloride intramuscularly at the same time. With the second unit of blood at 5:30 a.m. she received 40 mg Furosemide intravenously. Her blood pressure was recorded at 140/90. She had hemoptysis and was started on oxygen. She received another 40 mg Furosemide at 5:55. She was digitalized at 6 a.m. with .4 mg Deslanoside by another physician and was taken to x-ray and then transferred to intensive care unit.

She had abrupt respiratory arrest at 6:15 a.m. Cardiorespiratory resuscitation was begun plus Metaraminol Bitartrate intravenously. Sodium bicarbonate 44.6 meg intravenously X4, Epinephrine 1:10,000 (10 cc intravenously X2), Furosemide 40 mg intravenously, Isoproterenol Hydrochloride Epinephrine 1:10,000 intracardiac. She was on a cardiac monitor and was observed to have cardiac standstill at 6:40 a.m.

The physician commented on the events and felt she either had an "acute amniotic emboli or a myocardiopathy, which led to massive failure during labor and certainly do not feel that this lady was simply overloaded. This was a tragic event and seemed it couldn't have been avoided."

There was no comment of a ruptured uterus and there was no autopsy.

Maternal Mortality

Cause of death was listed:

Amniotic emboli versus
postpartum cardiomyopathy
Anemia
Congestive heart failure

Comment

The Committee listed this as a direct obstetrical, preventable death with factors on the part of the patient and the physician. The patient was remiss in that she did not report for prenatal care.

It was felt by the Committee that the patient should have been operated on within a short time after admission to the hospital. A person, with a history of a previous Cesarean section and the clinical picture which was described to us, would seem to have a uterine rupture. Hemorrhage and subsequent demise will occur when uterine rupture is not promptly diagnosed.

FP Board Announces Deadline For Certification Exam

The American Board of Family Practice announces the next certification examination will be given October 30-31, 1976. The two-day written exam will be held in seven cities in the United States. It is necessary for each physician desiring to take the exam to file a completed application with the Board office by **June 15, 1976.**

Further information can be obtained by writing: *Nicholas J. Pisacano, M.D., Executive Director and Secretary, American Board of Family Practice, Inc., University of Kentucky Medical Center, Lexington, Kentucky 40506.*

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BRIEF SUMMARY OF
PRESCRIBING INFORMATION
ANTIMINTH® (pyrantel pamoate)
ORAL SUSPENSION

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13μg/ml) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with preexisting liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg of pyrantel base/ml) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg/lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 ml of Antiminth per 10 lb. of body weight. (One teaspoonful=5 ml.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

How Supplied. Antiminth Oral Suspension is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg pyrantel base per ml, supplied in 60 ml bottles and Unitcups™ of 5 ml in packages of 12.

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IN KENTUCKY

MARCH

18 "Medical-Surgical Complications in Diabetes,"** Health Sciences Center, University of Louisville School of Medicine, Louisville

23 Postgraduate course, "Breast Cancer Management," (Speaker: Rama M. Jager, M.D., Assistant Professor of Surgery, University of Louisville School of Medicine), Whitesburg Appalachian Regional Hospital, Whitesburg

24 "Management of Gastrointestinal Bleeding,"** Suburban Hospital, Louisville

25-26 "Medical Aspects of Sports," sponsored by KMA, KHSAA and KTA, Executive Inn, Louisville

31-April 1 22nd Symposium on Cardiovascular Diseases, Heart Association of Louisville and Jefferson County, Health Sciences Center, Louisville

APRIL

12-14 "Frontiers of Medical Science: The Clinician as Translator," American College of Physicians and University of Kentucky College of Medicine. Contact: Registrar, Postgraduate Courses, ACP, 4200 Pine Street, Philadelphia, Pa. 19104.

22-24 "Diagnosis and Management of High Risk Pregnancy,"** Health Sciences Center, University of Louisville, Louisville

22-26 "Modern Management of Major Problems in Surgery," University of Louisville School of Medicine. Contact: Hiram C. Polk, Jr., M.D., Department of Surgery, University of Louisville, Health Sciences Center, Louisville 40201.

23-24 "Management of Diabetic Complications,"* University of Kentucky Medical Center, Lexington

28 "Cardiac Drugs,"** Health Sciences Center, University of Louisville, Louisville

28-30 "Gastrointestinal Radiology Symposium,"* University of Kentucky Medical Center, Lexington Hilton Inn, Lexington

MAY

19-20 Annual Meeting, Kentucky Chapter, American Academy of Pediatrics, Big Spring Country Club, Louisville

19-20 Annual Assembly, Kentucky Academy of Family Physicians, Ramada Inn, Louisville

25 Postgraduate course, "Clinicopathological Conference," (Speaker: Alfred Krake, M.D., Medical Director, Mountain Comprehensive Health Clinic, and Agapito Del Rosario, M.D., Pathologist, Whitesburg Appalachian Regional Hospital), Whitesburg

26 "Immunology and Malignant Disease,"** St. Anthony Hospital, Louisville

JUNE

2-3 KMA Emergency Health Care Seminar, Executive West, Louisville

4-5 Annual Meeting, Kentucky Occupational Medicine Association, Galt House, Louisville

IN SURROUNDING STATES

APRIL

3-4 AMA Regional Continuing Medical Education Program, Stouffer's Indianapolis Inn, Indianapolis

5-8 Annual Session, American College of Physicians, Philadelphia Civic Center, Philadelphia

7-8 "Sports Medicine," Cleveland Clinic Educational Foundation, Cleveland

11-15 Spring Session, American Academy of Pediatrics, Bellvue Stratford Hotel, Philadelphia

MAY

5-6 11th Annual Indiana Multidisciplinary Child Care Conference, Marriott Inn, Indianapolis. Contact: Morris Green, M.D., 1100 West Michigan St., Indianapolis 46202

1976
MARK YOUR CALENDAR

June 26-July 1, AMA Annual Convention, Dallas

September 27-30, KMA Annual Meeting, Ramada Inn, Bluegrass Convention Center, Louisville

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**For further information, contact: Frank R. Lemon, M.D., Associate Dean for Continuing Education, University of Kentucky College of Medicine, Lexington 40506*

***For further information contact: Gerald D. Swim, Executive Director, Office of Continuing Education, University of Louisville School of Medicine, Louisville 40202*

ORGANIZATION SECTION

Digest of Proceedings, Board of Trustees December 17-18, 1975

The second regular session of the KMA Board of Trustees was held on December 17-18 at the KMA Headquarters Office. The President's Report, Headquarters Office Report and AMA Delegate's Report were reviewed and accepted for information.

The Board appointed members to a new Committee on Health Care Costs and various other committee appointments were also made.

The current status of Blue Shield's participation in CHAMPUS and the Individual Practice Association was reviewed by a Blue Shield representative.

Provisional accreditation of the Louisville Area CME Consortium was approved by the Board and final accreditation authority was turned over to the Committee on Continuing Medical Education.

Approval was given by the Board to sponsor a one-half day workshop on "Financial Control of Your Medical Practice." The re-election of Carroll Witten, M.D.. to the AMA Constitution and Bylaws Committee was given support by the Board.

The Board reviewed and took action on numerous legislative proposals before the 1976 Kentucky General Assembly which were presented by the Committee on State Legislative Activities.

A discussion was held on the report of the Task Force on Medicine of the Council on Public Higher Education. An ad hoc committee was appointed to study this report and to keep KMA informed of the Council's activities.

A panel discussion on liability insurance was held and Board members heard a report by Thomas Marshall, M.D., on the Governor's Task Force proposal. The opening of the Frankfort office during the General Assembly and the hiring of additional staff to handle the malpractice legislation was also reported on. A lengthy discussion was held on specific points of the legislation and it was the recommendation of the Board of Trustees to support the Majority Report as submitted by the Governor's Task Force.

Top Surgeons To Be Featured At 2nd U of L Symposium

The Second Postgraduate Symposium on Major Problems in Surgery, sponsored by the University of Louisville School of Medicine Department of Surgery, will be held April 22-26.

Speaking on such topics as "Surgical Infections and Complications," "New Horizons in Transplantation," "Pediatric Surgical Problems," and "Emergency Surgery," will be Walter Ballinger, M.D., Washington University School of Medicine, St. Louis, and Henry Buchwald, M.D., University of Minnesota Medical School, Minneapolis.

Also featured on the scientific program will be Ben Eiseman, M.D., University of Colorado Medical School, Denver; Eric Fonkalsrud, M.D., University of California School of Medicine, Los Angeles; Marshall Orloff, M.D., University of California, San Diego; William Silen. M.D., Harvard Medical School, Boston, and faculty members from the University of Louisville School of Medicine.

The registration fee is $275 for the program which is accredited for 21 hours, Category I, AMA Physician's Recognition Award. All scientific meetings and additional tours and social activities are included in the fee.

Further information and registration can be obtained by writing Hiram C. Polk, Jr., M.D., Chairman, Department of Surgery, University of Louisville School of Medicine, Health Sciences Center, Louisville, Kentucky 40201.

Nominations Being Accepted For KMA Awards

Fred C. Rainey, M.D., Elizabethtown, Chairman of the KMA Awards Committee, announces that the Committee is now accepting nominations for the Kentucky Medical Association Award and the Distinguished Service Award.

The KMA Award is designed to honor an outstanding layman and the Distinguished Service Award honors the outstanding physician of the year. The awards are presented annually at the President's Luncheon during the KMA Annual Meeting in September.

Nominations for awards should be forwarded to the KMA Headquarters Office and marked: "Attention: Awards Committee."

Honors Bestowed

George C. McClain, M.D., Benton, was named "1975 Citizen of the Year" by the Marshall County Chamber of Commerce. A family practitioner in Marshall County for 29 years, Doctor McClain received the honor at the organization's January membership meeting in Gilbertsville.

Mary Pauline Fox, M.D., Pikeville, was recently named the Woman of Achievement for 1976 by the Kentucky Federation of Business and Professional Women's Clubs at a February meeting of the group in Louisville. Doctor Fox is Pike County's health officer.

Physicians Are Urged To Use New Insurance Handbook

Metropolitan Life Insurance Company, as the Part B carrier for Kentucky, and the Kentucky Department of Human Resources, as the Medical Assistance Program administrator, jointly published and distributed a "Guide for Medical Assistants" to all physicians in the state in September, 1975. This handbook deals with Medicare and Medicaid guidelines and billing methods and also contains a copy of the New York Relative Value Scale used in processing claims.

All offices are urged to cooperate with the Metropolitan and the Department of Human Resources in providing procedure codes and descriptions on claim forms and on bills to patients. The use of procedure codes affects the reimbursement on particular claims, reduces the amount of investigation required by the two agencies and results in a more accurate profile of physicians customary charges.

Sports Seminar To Be Held March 25-26 in Louisville

The Fifth Annual "Medical Aspects of Sports" Seminar will be held March 25-26 at the Executive Inn in Louisville.

Thomas Shaffer, M.D., Ohio State University, Columbus, will speak on "Potentials of Female Participation in Athletics" and "Matching Athletes on the Basis of Maturation." The two-day program will also feature presentations by many Kentucky physicians, as well as trainers, coaches and lawyers.

Sponsored by KMA, the Kentucky High School Athletic Association and the Kentucky Trainers Association, the program is designed for physicians, school administrators, teachers, coaches, trainers and student trainers.

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Contraindications: Patients with known hypersensitivity to the drug.
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.
Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.
Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.
Usual Daily Dosage: Individualize for maximum beneficial effects. *Oral—Adults:* Mild and moderate anxiety and tension, 5 or 10 mg *t.i.d.* or *q.i.d.*; severe states, 20 or 25 mg *t.i.d.* or *q.i.d. Geriatric patients:* 5 mg *b.i.d.* to *q.i.d.* (See Precautions.)
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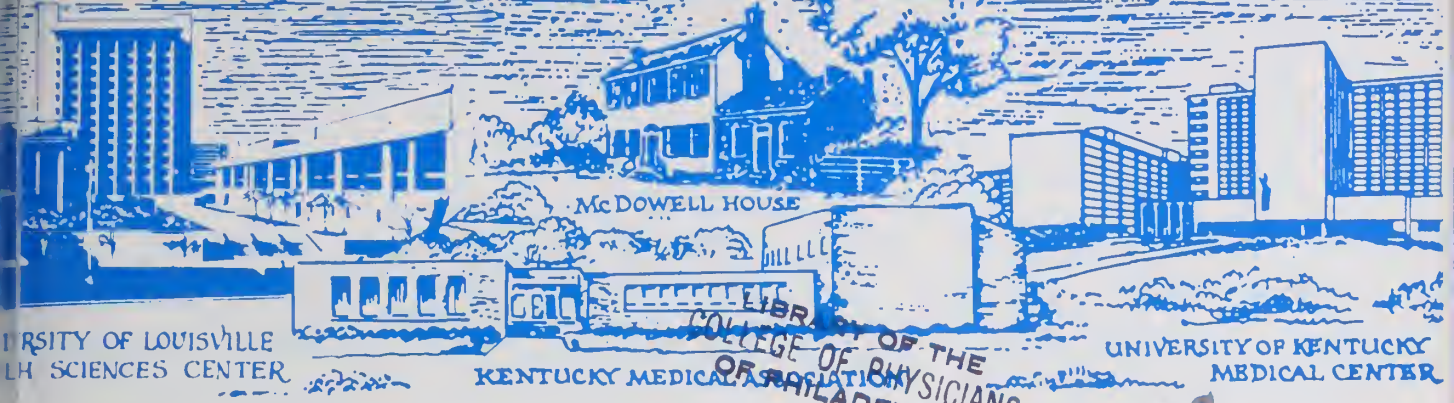
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The Journal of The KENTUCKY Medical Association

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Both often



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Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

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Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

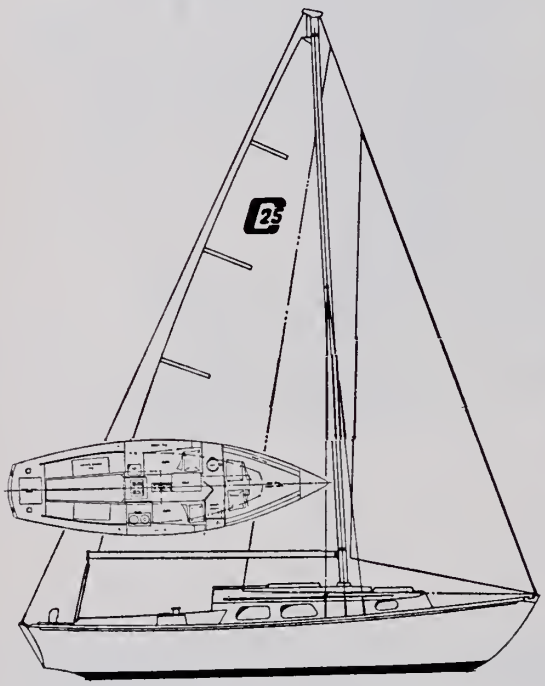
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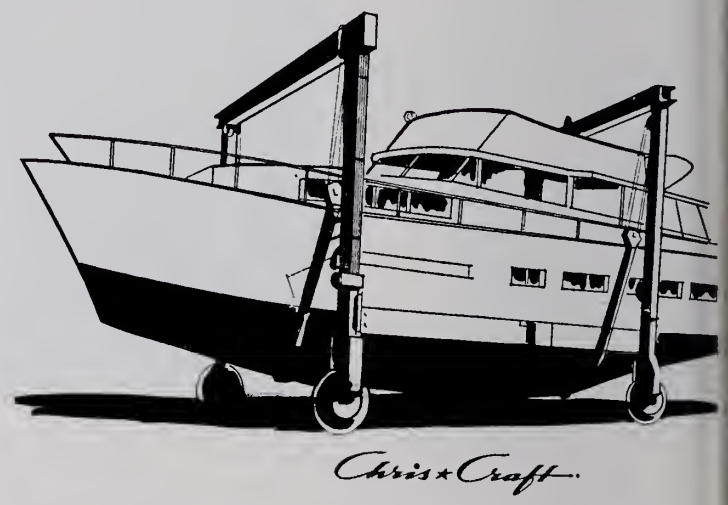
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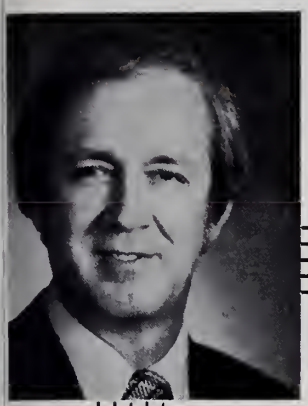
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MESSAGE FROM THE PRESIDENT



The 1976 General Assembly is now history and it was quite a legislative session! To "capsulize" the KMA lobbying effort, one would have to say that it was a great success. Chief and foremost among the legislative matters considered were those involved with malpractice legislation. Because of the diligent work of the Executive Committee, the State Legislative Chairman, Doctor Carl Cooper, and staff, we were able to pass legislation, which in the eyes of the House of Delegates and Board of Trustees, was considered the minimum required for making liability insurance available to all physicians and hospitals in the State. One cannot speak of medical liability problems in the General Assembly without mentioning the names of Jerry Mahoney, a long-time KMA staff man, and William Doll, an attorney with Hazelrigg and Cox of Frankfort, who acted as a special KMA lobbyist. These two individuals played a significant role on behalf of the physicians of Kentucky and their efforts should certainly be applauded.

The medical liability package which KMA shepherded through the General Assembly is in reality a stop-gap measure. It was felt by the Board of Trustees that the best approach toward a malpractice solution during 1976 would be to make insurance available to all physicians and hospitals and to not commit ourselves toward the development of a permanent solution at this time. There were and continue to be many physicians who have expressed concern over individual points of the malpractice program and who have offered varied solutions which, in their own minds, are workable. But if one thing is true in the past few months on the liability scene, it is that no one solution to the problem has been forthcoming. These solutions have run the gamut from pre-trial screening panels, binding arbitration, limitation of awards, etc. It is wise then for us to charge the medical profession with further diligence and efforts toward seeking a permanent solution. I personally feel positive that the issue will have to be faced in the 1978 General Assembly and we must not forget this point when considering the cost of our lobbying efforts in 1976.

Equally significant as the success in the medical liability field were the lobbying efforts on behalf of medicine in other health care fields. Our friends, the chiropractors, were met in the Halls of Frankfort and once again were repulsed. Significant, also, is the fact that the optometric "Drop Bill" was defeated. This bill generated a great deal of concern, particularly among the ophthalmologists, and I can truthfully say that if it were not for KMA and its lobbying efforts the Drop Bill would now be law. The Administration backed successfully the passage of increasing the number of primary care residencies with the support of KMA. The Physician Assistant legislation did not pass through the General Assembly, but the same issue will remain before us and is sure to come up at the next session.

Finally, it is with a great deal of personal satisfaction that I offer to the Governor of the great Commonwealth of Kentucky, the Honorable Julian Carroll, and his staff, my sincere personal thanks and the gratitude of all physicians of the Commonwealth for his aid and untiring efforts on our behalf.

David A. Hull

POSTGRADUATE OPPORTUNITIES

IN KENTUCKY

APRIL

12-14 "Frontiers of Medical Science: The Clinician as Translator," American College of Physicians and University of Kentucky College of Medicine. Contact: Registrar, Postgraduate Courses, ACP, 4200 Pine Street, Philadelphia, Pa. 19104.

22-24 "Diagnosis and Management of High Risk Pregnancy,"** Health Sciences Center, University of Louisville, Louisville

22-26 "Modern Management of Major Problems in Surgery," University of Louisville School of Medicine. Contact: Hiram C. Polk, Jr., M.D., Department of Surgery, University of Louisville, Health Sciences Center, Louisville 40201.

23-24 "Management of Diabetic Complications,"* University of Kentucky Medical Center, Lexington

28 "Cardiac Drugs,"** Health Sciences Center, University of Louisville, Louisville

28-30 "Gastrointestinal Radiology Symposium,"* University of Kentucky Medical Center, Lexington Hilton Inn, Lexington

MAY

11-12 Practice Management Workshop, sponsored by KMA and AMA, Ramada Inn, Louisville

19-20 Annual Meeting, Kentucky Chapter, American Academy of Pediatrics, Big Spring Country Club, Louisville

19-20 Annual Assembly, Kentucky Academy of Family Physicians, Ramada Inn, Louisville

20-22 Fifth Biennial Symposium, "Cancer in Women," Galt House, Louisville

22-23 Annual Meeting, Kentucky EN&T Society, Mammoth Cave National Park, Mammoth Cave

25 Postgraduate course, "Clinicopathological Conference," (Speaker: Alfred Krake, M.D., Medical Director, Mountain Comprehensive Health Clinic, and Agapito Del Rosario, M.D., Pathologist, Whitesburg Appalachian Regional Hospital), Whitesburg

26 "Immunology and Malignant Disease,"** St. Anthony Hospital, Louisville

JUNE

2-3 KMA Emergency Health Care Seminar, Executive West, Louisville

4-5 Annual Meeting, Kentucky Occupational Medicine Association, Galt House, Louisville

IN SURROUNDING STATES

MAY

5-6 11th Annual Indiana Multidisciplinary Child Care Conference, Marriott Inn, Indianapolis. Contact: Morris Green, M.D., 1100 West Michigan St., Indianapolis 46202

JUNE

26—July 1 Annual Convention, American Medical Association, Dallas

For further information, contact: Frank R. Lemon, M.D., Associate Dean for Continuing Education, University of Kentucky College of Medicine, Lexington 40506

***For further information contact: Gerald D. Swim, Executive Director, Office of Continuing Education, University of Louisville School of Medicine, Louisville 40202*

FACULTY POSITION

The Department of Pathology invites applications from pathologists for a part-time position of instructor in the Department of Pathology. Duties for this position would be in the area of service within the University Affiliated Hospital System and teaching both at the undergraduate and intern-resident level. The position calls for two (2) full days per week on a fiscal basis beginning July 1, 1976. Applicants must be Board eligible or Board certified in both Anatomic and Clinical Pathology.

Specific service teaching duties would include: 1) supervision of interns and residents in autopsy procedures, 2) proper disposition and interpretation of surgical specimens, 3) assistance and instruction in selected areas of clinical pathology, 4) laboratory instruction for sophomore course in Pathology, and 5) development and presentation of seminars for resident and intern instruction.

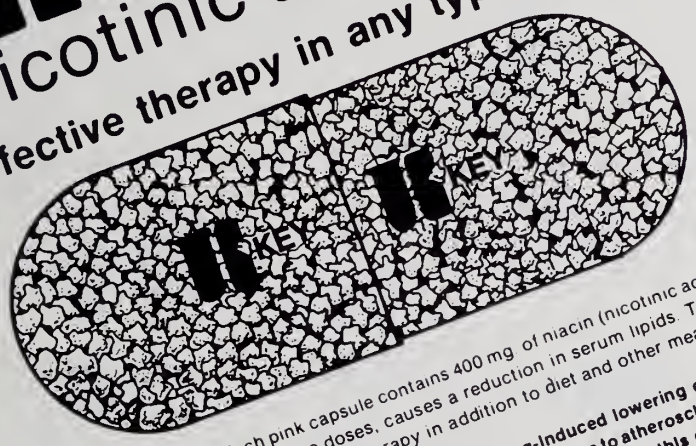
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Complete literature available on request from Professional Services Dept. PML.



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New Employee Groups Enrolled	1,524	1,459

Claims Experience

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	1975	1974	1975	1974
Indemnity	336,805	315,477	$13,844,000	$13,272,037
Usual, Customary and Resaonable	*343,415	271,772	17,321,520	12,683,786
Champus	* 22,218	17,872	1,996,791	1,574,122
Extended Benefits, BCBS Medicare Supplement, Major Medical and F.E.P. Supplemental	144,307	133,356	9,396,936	7,351,438
Grand Totals	**846,745**	**738,477**	**$42,559,247**	**$34,881,383**

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VOLUME 74 APRIL 1976 NUMBER 4

Extracranial Carotid Atherosclerosis†

C. DALE BROWN, M.D.

Paducah, Kentucky

Cerebral ischemia and embolization from carotid atherosclerosis is a serious medical problem which all too frequently is not realized as a treatable entity. The author reiterates the importance of correct diagnosis, workup and management of these patients.

THE prompt recognition and treatment of symptomatic extracranial arterial lesions are imperative. A missed or delayed diagnosis can result in disabling morbidity and preventable mortality. Since the first published[1] carotid endarterectomy in 1954, reconstructive carotid surgery has become an established routine, and safe procedure in larger hospitals.

Incidence

At least 40% of strokes are thought to result from extracranial atherosclerosis[2], and the incidence of cerebral symptoms in the over 40 age group is alarming.

White men and women far outnumber blacks. In a community of 2,455 patients over 40 years of age, Karp found 15.9/1000 white men, 11.5/1000 white women, 7.0/1000 black men, and 7.8/1000 black women had existing or prior cerebral symptoms.[3] The West African, who genetically is related to the black American, appears to be immune to cerebral and extracerebral atherosclerosis. At the University Hospital in Ibadan, Nigeria, stroke secondary to atherosclerosis is a rarity even in the aged.[4] Thus, it has been suggested that atherosclerotic cerebral disease in black Americans is to a great extent environmental.

Diagnosis

Before 1952, ischemic cerebral symptoms were thought to be due to nonembolic obstruction of the intra and extracranial vessels. C. M. Fisher elaborated further, and in a 1952 publication[5] postulated that cerebral embolization from carotid bifurcation atheroma was a distinct medical entity. Others have proven this postulation to be fact.[6] The TIA (transient ischemic attack) may present in a variety of ways; however, the most common presentation is temporary paralysis or paresis of an extremity. Other important symptoms and signs, which may occur together or singly, are ipsilateral visual disturbances (amaurosis fugax), aphasia, tingling or numbness in the face or extremity, ataxia or disturbed equilibrium. The list of minor neurological changes is long and truly impressive.[7] Even a minor sign can alert the wary clinician to initiate steps toward diagnosis and therapy.

Fisher described in 1957 the relationship between the carotid bruit and carotid bifurcation disease.[8] A bruit heard over the mid and upper cervical neck is an extremely important clinical sign. It should not be demeaned and matters not whether the bruit is heard in a symptomatic or asymptomatic patient. A carotid bruit heard in an asymptomatic patient is associated with carotid stenosis in 65% of patients. If the patient has cerebral symptoms and a bruit, carotid stenosis

†*From the Department of Diagnostic Radiology, Lourdes Hospital, Paducah, Kentucky 42001.*
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can be proven in 75% of these patients. In those with cerebral symptoms without bruits, only 25% have demonstrable carotid stenosis.[9] Therefore, patients with carotid bruits and no known etiology, i.e. cardiac murmur, should be investigated.

Angiography

One of the most common causes of the transient ischemic attack is embolization from carotid bifurcation atheroma. Intracerebral atherosclerosis also contributes to cerebral ischemia, and both neck and intracerebral vessels should be evaluated before operation. Standard radiological procedures include arch aortography to visualize the origins of the great vessels and vertebrals, as well as selective carotid angiography, to delineate the carotid bifurcations and intracerebral vessels. When posterior fossa atherosclerosis is suspected, selective vertebral angiography can be included.

Improvement in surgical technique and immediate availability of reconstructive intracerebral revascularization procedures demand complete angiographic evaluation of arch, neck and cranial vessels.[10]

Evolution of the Carotid Atheroma

Specimen examination and angiography have contributed to the understanding of the evolution of symptomatic carotid artery atheroma. As the atheroma enlarges, small fragments of plaque and vessel wall are shed into the carotid stream. These produce TIA's and strokes. The periphery of the atheroma becomes jagged and the center may ulcerate (Fig 1). Subsequently, these irregular margins and craters act as foci for platelets and blood thrombi which also enter into and up the carotid lumen as emboli[11] (Fig 2). The pathological process of micro-embolization is important in understanding the surgical significance of small ulcerated carotid plaques.

In evaluating carotid stenosis, there is a tendency to underestimate the degree of existing stenosis. Not infrequently this fact is reiterated to the angiographer by a dismayed surgeon who finds a much larger plaque and tighter stenosis than preoperatively anticipated (Fig 3). Experimentally an encroachment of 70% of the lumen impairs flow in an otherwise normal artery.[12] Additional stenotic lesions in the same carotid system alter normal flow, therefore we consider a vessel significantly stenotic if by measurement the diameter of the lumen is at least 50% narrowed.

Patient Selection

The surgical selection of patients is based upon clinical and radiological assessment of the disease. Several studies have helped with this process and The Joint Study of Extracranial Occlusion[13] has provided much needed information for proper patient evaluation. Simply stated, if a patient recovers promptly or is left with minimal residual neurological deficit following cerebral incident,

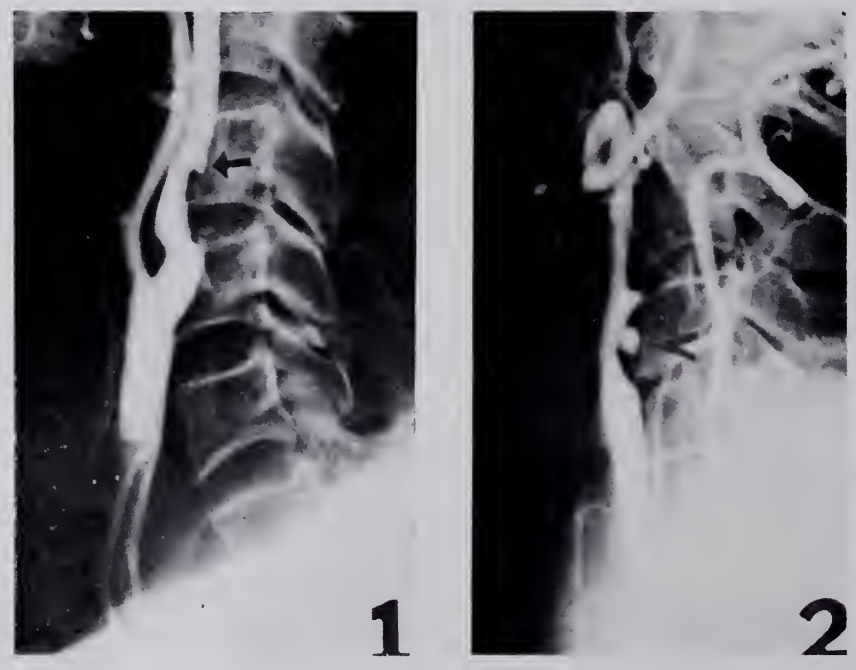


FIG. 1 A 2 cm long posterior wall atheroma is seen in Case 1. The upper edge is acutely angled and acts hemodynamically as an ulcerated plaque and focus for microemboli. In Case 2 a deeply ulcerated common carotid plaque is identified in a patient whose progressive disease has occluded the internal carotid artery.



FIG. 2. A 49-year-old river barge worker was admitted with multiple embolic episodes over a two-day period. At surgery a small ulcerated plaque, a large fresh adherent thrombus was excised (arrow).

and a significant carotid lesion can be demonstrated surgery is advisable. If however, there is moderate residual damage nonoperative treatment is recommended. In the Joint Study report one group of patients classified as permanently disabled and operated had only a 48% survival at 42 months. In a second similarly matched permanently disabled group, 71% of those managed conservatively survived.

In the nondisabled TIA and mild stroke group, the endarterectomy was found to be most beneficial in prevention of further symptoms and is overwhelmingly in favor of surgical management.

In order to qualify as a surgical remedial arterial lesion certain criteria should be met. Basic facts must be considered in patient evaluation and selection. The criteria listed are substantiated by the literature and are proposed as guidelines.

1) Clinical evaluation reveals that the patient can tolerate major surgery.

2) The patient has a history of transient ischemic attacks.

3) If a stroke has occured little if any disability remains.

4) The candidate has 50% stenosis in one carotid artery.

5) If both carotids are stenotic, the symptomatic side must have at least 30% stenosis.

6) The stenotic lesion in the accessible neck area is equal to or tighter than a stenotic lesion more distal in the same internal carotid system.

7) An ulcerated carotid plaque exists without regard to size or symptoms.

Conclusion

Extracranial atherosclerosis is a frequently encountered medical entity. Correct clinical, radiological and surgical assessment can now benefit many patients who previously were thought to be

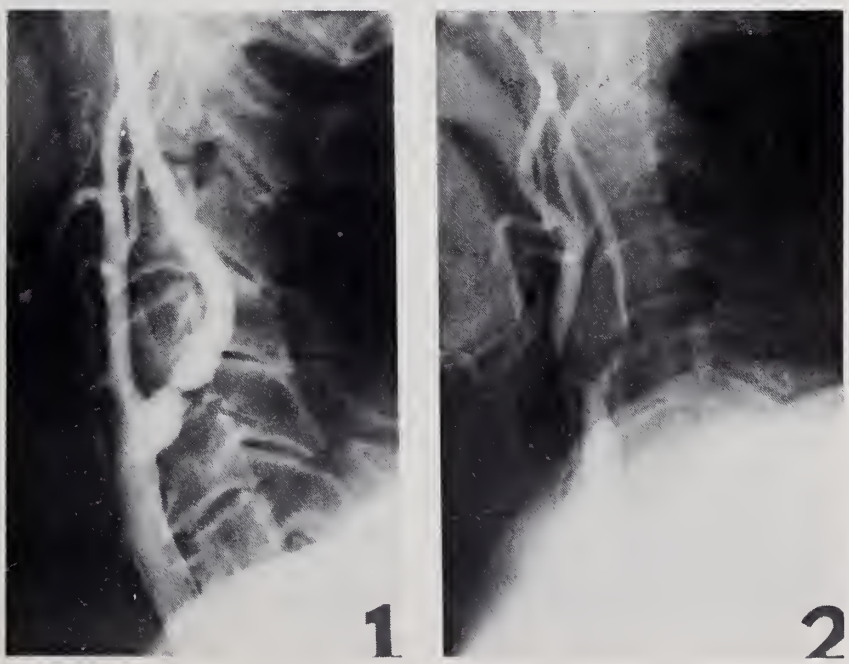


FIG. 3 At endarterectomy the surgeon could not find the carotid lumen in Case 1. The opening existed only as a small slit on the anterior wall of the internal carotid artery. In Case 2 the atheroma is large and the stenosis tight. The internal carotid artery above the stenosis is decompressed and in reality is larger than it appears during angiography.

medically unmanageable. This assessment is presented as a guideline for improved patient management.

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Manuscript Memos

Manuscripts should be submitted in duplicate to The Journal of KMA, an original copy and one carbon, and typed with double spacing. Maximum length of an article should not exceed 4500 words; the Board of Consultants on Scientific Articles prefers that they be briefer than this when possible.

In submitting a manuscript, the author is requested to include a concise summary, not to exceed 35 words, to be used as a sub-title when the article is published in The Journal. The purpose of the summary is to create additional interest and encourage greater readership.

Footnotes and bibliographies should conform to the style of the Quarterly Cumulative Index Medicus published by the American Medical Association. This requires in the order given name of author, title of article, name of periodical, with volume, page, month —day of month if weekly—and year. The Journal of the KMA does not assume responsibility for the accuracy of references used with scientific articles.

All scientific material appearing in The Journal is reviewed by the Board of Consultants on Scientific Articles. The editors may use up to six illustrations with the essayist bearing the cost of all over three one-column halftones.

Arrangements for reprints of an article should be made directly with the publisher of The Journal, Gibbs-Inman Printing Company, 817 W. Market St., Louisville, Ky.

The bylaws of the Kentucky Medical Association provide that all scientific discussions and papers read before the KMA Annual Meeting shall be referred to the KMA Journal for consideration for publication. The bylaws further state that the editor or the associate editor may accept or reject these papers as it appears advisable and return them to the author if not considered suitable for publication.

Please mail your scientific articles to The Journal of the Kentucky Medical Association, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205.

The Use of Exercise in Diagnosis and Treatment of Cardiac Patients In a Community Hospital: Experience Over 27 Months†

Stuart L. Lowenthal, L.P.T. and R. G. McAllister, Jr., M.D.
Lexington, Kentucky

A review of the first 27 months experience in a diagnostic exercise laboratory and an associated cardiac rehabilitation program indicates that acceptable results can be obtained from both aspects of the program without full-time physician involvement and that quality control can be maintained. The program is accepted by physicians in private practice, provides a needed service resource for the community's patient population, and can be carried out with a high degree of patient safety.

APPROACHES to the evaluation and therapy of patients with cardiac illness, particularly those with symptomatic ischemic heart disease, have undergone dramatic changes over the past decade. With the introduction of exercise electrocardiography and coronary angiography, the diagnosis of angina pectoris due to obstructive coronary arterial narrowing need no longer be based solely on an evaluation of a characteristic symptom complex, but can be substantiated by objective manifestations of myocardial ischemia.[1] The Master's Two-Step Test has been largely replaced by more accurate progressive exercise procedures, usually involving a treadmill,[1,2] and graded exercise stress testing (GXT) is an important diagnostic tool for the physician who cares for patients with ischemic cardiac disease.[3] In addition to a basic role in objective confirmation of the clinical impression of myocardial ischemia, standardized exercise testing is an essential technique for determining a patient's functional exercise capacity;[4] it can be used to decide whether or not a post-myocardial infarction patient can or should resume certain types of physical activity,[5] or whether an asymptomatic adult may safely engage in unaccustomed, vigorous exercise.[6]

As an extension of diagnostic exercise testing, progressive aerobic exercise conditioning programs have been shown to decrease symptoms and improve work capacity in patients with angina pectoris and documented coronary arterial disease,[7,8] and, in addition, to offer significant psychologic benefits and improve the rate of return to gainful employment.[8,9] Individualization of such exercise conditioning programs, essential both for patient safety and for maximum patient benefit,[6,10] is most conveniently derived from the standardized GXT as an "exercise prescription".[6]

Facilities for diagnostic GXT procedures have been most commonly established under the supervision of cardiologists in large university medical centers, while exercise conditioning programs for patients with coronary disease have generally been conducted by physical therapy departments with little input from the patients' physicians. In an effort to avoid this illogical division of services, and to determine whether an organized exercise program for the diagnosis and treatment of cardiac patients could be sustained in a non-university hospital without a full-time, in-house cardiology staff, an exercise laboratory was organized in the Physical Therapy Department at a community hospital in Lexington, Kentucky, in the summer of 1973. A review of the activities of this exercise program and the results obtained over the 27 months since its founding are presented here and suggest that similar programs can be appropriately established at other community hospitals.

†*From the Department of Physical Therapy (Division of Cardiac Rehabilitation), Good Samaritan Hospital and the Department of Medicine, University of Kentucky Medical Center, Lexington. Supported in part by a grant from the Ohio Valley Regional Medical Program, #5-GO 3-RM-000048-04A6.*
Submitted at KMA: 12-31-75

Description of Facilities

General: The Good Samaritan Hospital is a 300-bed community hospital with both regular and courtesy staff appointments for physicians. The Physical Therapy Department consists of three full-time, salaried physical therapists and one part-time therapist, all of whom provide patient services on physician referral. The hospital's Coronary Care Committee is elected annually from the physicians with regular medical staff appointments at the hospital and assumes responsibility for cardiac-related activities in the institution. The hospital does not have facilities for cardiac catheterization or open-heart surgery.

Diagnostic Exercise (GXT) Laboratory: A variable-speed, variable-elevation treadmill was obtained initially with the assistance of a grant from the Ohio Valley Regional Medical Program. For monitoring during exercise, a single-channel oscilloscope, with an attached electrocardiograph (EKG) serving as a slave write-out system, is used. The hospital has provided resuscitation equipment, including a defibrillator and a standard emergency cart. Including an examination table, this equipment occupies a space approximately 10 x 15 feet and requires no special electrical wiring.

Cardiac Exercise Rehabilitation Program: The regular facilities of the Physical Therapy Department are utilized for the rehabilitation program, including treadmills, bicycle ergometers, weights, stairs and a punching bag. However, these facilities are utilized as the Cardiac Rehabilitation Division during hours when the Physical Therapy Department does not normally treat other patients.

Organization and Methodology

GXT Laboratory: The policies and procedures for the GXT laboratory are recommended by the Chief Physical Therapist who serves as the director of the laboratory, and a part-time cardiology consultant, who serves on the hospital's courtesy staff and is not engaged in private practice. These policies and procedures are reviewed by the Coronary Care Committee and approved or modified as required.

Patients are accepted for stress testing only on referral from their private physicians, and the physician must be present during the test to insure maximum safety.[11] The physician need not, however, be skilled in the procedure, which is effectively carried out by the staff of the Physical Therapy Department. A pre-test 12-lead resting EKG is recorded and evaluated for all patients. The exercise test itself is done according to the protocol defined by Bruce and Hornsten.[3] An anterior chest lead, approximating a V_5 lead, is monitored throughout exercise, with permanent recordings of the EKG tracing made at least once each minute. Blood pressure is recorded by auscultation at the end of each three-minute exercise stage. After the exercise procedure is halted, the patient is monitored for at least an additional six minutes, or until his heart rate has returned to pre-exercise levels, any symptoms produced have disappeared, and EKG changes have resolved.[3]

GXT results are formally interpreted by the program's consultant cardiologist, and a data sheet with observations recorded during the test, pertinent portions of the EKG record and conclusions derived is sent to the patient's physician, with a copy retained in the division's files.

Rehabilitation Program: Patients are accepted into the cardiac rehabilitation program on referral from their physician. An exercise stress test is performed and from the GXT an exercise prescription is derived from the patient,[6] providing him with sufficient aerobic exercise to insure a conditioning effect but avoiding a level of exercise which either produces symptoms or EKG changes. The exercise prescription is re-evaluated at intervals and modified as necessary.

The exercise rehabilitation sessions are held in the hospital's Physical Therapy Department on a thrice-weekly basis, with each session lasting approximately 60 minutes; the program continues for 12 weeks. At the end of the program, a second stress test is performed to evaluate the results of the physical conditioning on the patient's functional capacity.

Each exercise session consists of a warm-up period, conditioning exercises and a cool-down session. The blood pressure is taken at the beginning of each session and further as indicated. The patient is taught to measure his own pulse rate, monitors this during each conditioning activity and records it on a daily exercise log. Patients are instructed to report any unusual symptoms to the supervising therapist. The warm-up period usually lasts 5-10 minutes and consists of partial sit-up and straight-leg raising activities. Conditioning exercises include treadmill walking, riding a bicycle ergometer and stair climbing. Each exercise is designed to produce a sustained increase

Table 1

Good Samaritan Hospital Exercise Laboratory: Reasons for Referral for GXT (6/73-10/75)

	No. tests	%
1. Diagnosis	405	61
A. Chest pain syndromes	386	
B. Routine health screening	19	
2. Functional Capacity Evaluation	252	38
A. Post-myocardial infarction study	57	
B. Evaluation for rehabilitation program	68	
C. Other	127	
3. Diagnosis of Arrhythmia	4	1
TOTAL	661	100

Men 502
Women . . 159

in cardiac work (as estimated from the pulse rate) in order to produce the conditioning effect. Each patient is carefully progressed from a low intensity work load to a sustained work load, lasting up to 20 minutes.

Activity levels are reviewed weekly to determine the need to increase prescribed work loads to maintain the desired pulse increase. Following the conditioning activities, a cool-down period lasts 10-15 minutes and includes light isotonic upper extremity exercises and resistive quadricep exercises, as well as mild activity such as passing a basketball about a patient group.

The exercise activity is prescribed, supervised and monitored by a physical therapist, who has been trained in cardiac monitoring and resuscitative techniques. An EKG is taken if any unusual symptoms are reported by the patients during exercise. While no physician is present during the exercise sessions, a coronary care unit nurse is "on-call" to the Cardiac Rehabilitation Program during each exercise session, and hospital staff physicians are routinely present in the hospital during the late afternoon hours of the exercise sessions and could be summoned in an emergency.

After the rehabilitation program has ended, a report on each patient's progress, as documented with a follow-up GXT, is sent to the referring physician. The activities utilized and problems observed during the course of the program are presented to both the consulting cardiologist and the Coronary Care Committee in an on-going fashion.

Results

GXT Laboratory: During the first 27 months of operation of the diagnostic exercise laboratory, a progressive increase in utilization of the GXT has become evident. A total of 661 tests has been performed over this time, as outlined in Table 1, the majority as a diagnostic procedure for evaluation of chest pain symptoms. Over 75% of the tests have been carried out in men.

The diagnostic results of interpretation of the GXT are reported in Table 2. Less than 20% of the tests have indicated myocardial ischemia (i.e. angina pectoris), with approximately an equal number regarded as equivocal because of the presence of factors which make interpretation less reliable, such as an abnormal resting EKG or current treatment with cardioactive medication.[12-14] A considerable proportion of the tests in this latter group are done in patients after myocardial infarction or cardiac surgery and are carried out primarily as functional capacity evaluations, without diagnostic intent.

Table 2

Good Samaritan Hospital Exercise Laboratory: Diagnostic Results from GXT (6/73-10/75)

Diagnosis	No. Tests	%
1. Normal GXT	405	61
2. ECG Changes (S-T segment shift) consistent with myocardial ischemia	122	18
3. Equivocal Results (i.e., inadequate rate increase for dx, abnormal resting ECG, administration of digitalis, etc.)	134	21
TOTAL	661	100

Rehabilitation Program: Eighty-five patients have entered the structured three-month conditioning program, with three-quarters of them referred because of manifest ischemic heart disease (Table 3). A small subgroup of patients was referred because of the existence of risk factors which made them statistically likely to develop premature coronary artery disease, and an additional group included patients with myocardial dysfunction thought to be the result of hypertensive heart disease. Patients in the last group were accepted only if their blood pressure was well-controlled with pharmacologic therapy.

In terms of objective documentation of results, 73% of the patients entering the program had improved exercise capacity after physical conditioning. Three patients withdrew because of medical problems, serious arrhythmias in two of them. Another 14 patients withdrew for non-medical reasons, such as difficulty with transportation to the hospital for exercise sessions, moving their place of residence or lack of interest. Only six patients out of 68 completing the program showed no improvement in exercise capacity (Table 4).

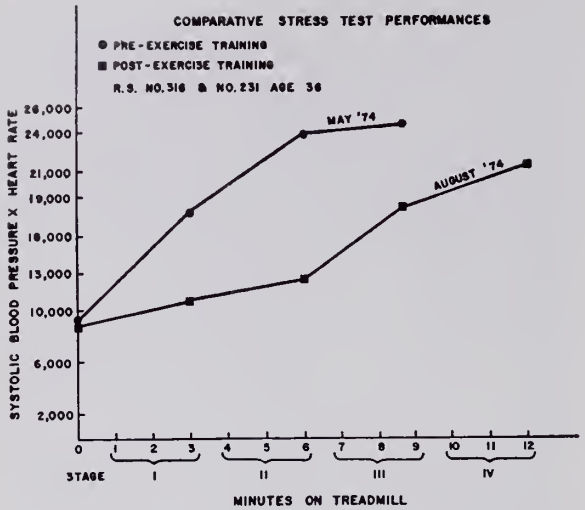


FIG. 1. The results of exercise stress testing before and after physical conditioning in a patient with angina pectoris. The product of heart rate and systolic blood pressure at the end of each exercise stage is used as an index of myocardial oxygen demand at that point. After exercise training, the patient completes comparable work loads at lower myocardial oxygen cost, compared to his pre-training performance.

Figure I illustrates an example of improved exercise capacity after physical conditioning. Since both heart rate and systolic blood pressure are determinants of myocardial oxygen demand,[3] their product at the end of each stage of exercise may be used to estimate the cardiac work required at that point. As shown in the figure, the patient was able to complete comparable work loads at less myocardial oxygen cost after completing the rehabilitation program.

Complications: During the 661 exercise tests reviewed, three complications were noted (0.4%.) Two patients developed sustained ventricular arrhythmias during exercise and required intravenous lidocaine by the attending physician for termination. One patient developed severe chest pain during maximal exercise which did not resolve after nitroglycerine administration, and he subsequently evolved a myocardial infarction. Each of these patients were admitted directly to the hospital from the exercise laboratory.

No serious complications have been seen during the rehabilitation program.

Discussion

Our experience demonstrates that a diagnostic GXT laboratory and an associated cardiac rehabilitation program can be established successfully in a non-university, community hospital environment. The major problem of quality control has been confronted by using a cardiology consultant to interpret the GXT results and to provide advice regarding the conduct of the rehabilitation program; since the consultant is not in private practice, the patient's physicians retain responsibility for and control over their patients, and become themselves involved in at least the diagnostic procedures, and occasionally in the rehabilitation activities. This approach has met with general acceptance by the hospital's administrative and professional staff.

Table 3

Good Samaritan Hospital Cardiac Rehabilitation Program: Types of Patients Referred (6/73-10/75)

Diagnosis	No. Patients	%
1. Ischemic Heart Disease	66	78
A. Post-myocardial infarction	47	
B. Angina Pectoris (no infarction)	19	
2. Hypertensive Heart Disease	9	10
3. High Risk For Development Of Ischemic Heart Disease	10	12
TOTAL	85	100

Men. . . .75
Women. .10

Prior to the establishment of the diagnostic exercise stress test laboratory, such facilities were available only at the community's university hospital and were infrequently utilized by community physicians. As a result, many were unfamiliar with the diagnostic and predictive power of exercise stress testing.[1-3,15] Mason et al, for instance, showed an 84% correlation between the presence of exercise-induced ST segment changes and significant obstructive coronary arterial lesions.[2] In a review of 2,700 patients, Ellestad and Wan emphasized the predictive aspects of exercise testing, finding a six-fold increase in the likelihood of development of coronary events in patients with ischemic electrocardiographic responses to exercise as compared to subjects with normal stress tests.[15]

With the repeated demonstration that progressive treadmill exercise testing is superior to the step-test method of Master,[1,2,12,16] the GXT procedure is becoming a routine technique in the evaluation of patients. Making these facilities

Table 4

Good Samaritan Hospital Cardiac Rehabilitation Program: Results in Patients Referred (6/73-10/75)

Result	No. Patients	%
1. Exercise Capacity Improved	62	73
2. Exercise Capacity Unchanged	6	7
3. Withdrew Due to Medical Problems	3	3.5
4. Withdrew For Personal Reasons	14	16.5
TOTAL	85	100

available to community physicians and insisting on their physical presence during the testing procedures have provided not only a useful patient service but also an educational experience for the involved physicians. Further uses for exercise stress testing are expanding the indications for the procedure in our laboratory and include the serial evaluation of patients after coronary bypass procedures, in whom an improvement in exercise capacity after surgery may be correlated with patient vein grafts,[17] and in the evaluation of exercise-induced arrhythmias.[18]

The scientific basis on which the cardiac rehabilitation program rests is less firm than that for diagnostic stress testing. Whereas it was formerly thought that physical training might stimulate the development of myocardial collateral vessels,[19] studies in man have not demonstrated such an effect.[7] Objectively, conditioning programs for patients with documented ischemic heart disease increase the amount of physical effort required to precipitate symptoms,[7] decrease myocardial oxygen demand at rest as well as during exercise,[5] and have been correlated with a more satisfactory patient sex life.[20] Our results confirm earlier findings of improved exercise tolerance after conditioning (Fig. 1). No study yet reported has shown that improvement in the physical fitness status of patients with coronary artery disease will reduce the incidence or severity of reinfarction or the likelihood of sudden cardiac death.[9,10]

The psychologic benefits of such a program, however, are unquestionable and have been documented in several studies.[4,5,8,9,20] Patients' morale is boosted by their self-demonstration of an ability to perform tasks which they had felt were beyond their capacity and by a decrease in limiting symptoms during their daily activities. After a properly structured rehabilitation program, post-infarction patients are much more likely to return to work.[4,5,8] Although evidence that exercise re-training prolongs life is lacking, improved physical fitness appears to have considerable benefits on the **quality** of life enjoyed by coronary patients.

There is little risk involved in diagnostic exercise testing, as noted by Rochmis and Blackburn[11] and our own experience. Potential hazards may be slightly greater in an on-going rehabilitation program since this patient population generally has a high proportion of patients with known cardiac disease (see Table 3). Ventricular fibrillation during exercise rehabilitation programs has been reported and the need for resuscitative equipment and trained personnel in attendance is obvious.[21,22] In the program reviewed here, the presence of a physician in attendance at each exercise session would involve prohibitive expense to the program's participants. Therefore, the program has been located within the hospital itself, a short distance from a coronary care unit in which trained nursing personnel are available if an emergency should occur. As an additional safeguard, the supervising therapist has received training in resuscitative procedures and is qualified as an Emergency Medical Technician.

Lastly, each patient in the program is made aware of the risks involved and must accept these voluntarily.

In summary, a review of the first 27 months of activity in a diagnostic exercise stress test laboratory and an associated cardiac exercise rehabilitation program established in a community hospital have demonstrated (1) that such a program can function within a physical therapy department with physician involvement only on a consultative basis; (2) that such a program is accepted by physicians on the hospital staff and can be objectively shown to improve the exercise capacity of patients completing the reconditioning sessions; and (3) that the program can be carried on with a high degree of patient safety.

Acknowledgement

We are grateful for the continuing support of the physicians on the Coronary Care Committee of Good Samaritan Hospital and to Mr. John Pratt, the hospital's administrator, without whose continuing assistance and support the program would not exist.

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Pap Smears in Primary Medical Office Practice: A Review and Reevaluation

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Lexington, Kentucky

A comment by a consulting pathologist on routine Pap smears prompted a study of present techniques used in Central Kentucky, a surprisingly unsuccessful review of literature and, finally, one currently recommended technique for Pap smears.

RECENTLY our office received several routine Pap smear reports from our consulting pathologist which contained the comment "inadequate number of endocervical cells on specimen." After an initial brief episode of pique, since we considered ourselves relatively up-to-date physicians who had done Pap smears for many years with (we thought) satisfactory results, we decided to reevaluate our technique of obtaining Pap smears to see if there was something we were not doing properly.

Our initial step was to develop a simple questionnaire and to have it filled out by all of the residents in our Family Practice residency program plus all of the faculty and part-time attending physicians who taught in this program. That questionnaire was very similar to the one in Table 1. We were quite surprised to see the wide variety of techniques for routine office Pap smears and the variety of educational experiences in which these techniques had been learned. It was not surprising that the older physicians had learned their technique for Pap smears in a variety of ways, ranging from instructions by a pathologist to postgraduate reading. We were somewhat surprised, however, that the resident physicians had learned Pap smears rather informally, some as a student and some during their postgraduate training, and that there was considerable variation in the techniques they had learned.

After thinking about these preliminary results, we felt there might be even greater variation in techniques and results among physicians in practice. We also felt that if this proved to be so, a review of currently recommended techniques for Pap smears might be of value. Physicians with a generation of practice experience are quite aware that the incidence of invasive cancer of the cervix has been drastically reduced since the introduction of the routine Pap smear as an office screening technique. Nevertheless, a significant number of cases of invasive carcinoma of the cervix are still treated in Central Kentucky. It occurred to us that unsatisfactory or outdated techniques for early cancer detection with the Pap smear might allow a small number of these cases to be missed when they are most amenable to early and optimum therapy.

Questionnaires were sent arbitrarily to three groups of physicians—Family Practice/General Practice, Internal Medicine, and Ob/Gyn—in 16 counties in the Central Kentucky area, on the hypothesis that these groups do the greatest majority of periodic health examinations including Pap smears. We arbitrarily decided to limit our physician sample to the counties in the Bluegrass area because of limited funds available for the survey.

The 1974 Kentucky Medical Directory was used to develop a list of 300 physicians in these three specialties for the survey. Of this number, 126 were in Family Practice/General Practice, 100 were in Internal Medicine, and 43 were in Ob/Gyn. We received a total of 131 replies, a percentage of 43.6% returned, which we considered quite good. Of this number, 19 did not specify their type of practice and these replies are not included in the tables. Six replied that they did not do Pap smears and 30 questionnaires were returned undelivered.

The questionnaire used is reproduced in Table 1, and Table 2 shows the data collected from the 106 completed replies.

Results and Comments

There were a greater number of responses concerning the time when Pap smear techniques

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Submitted at KMA: 12-17-75

Table 1

SURVEY—CURRENT TECHNIQUES FOR PAP SMEARS IN OFFICE PRACTICE

If you do not do Pap smears in your office, please check here _____ and return the questionnaire to us. Your area of practice: Ob/Gyn _____ Internal Medicine_____ Family Practice/General Practice _____ Other _____.

1. I learned my present technique for taking routine Pap smears
   - _____As a medical student.
   - _____As an intern or resident in training.
   - _____At a formal post-graduate or continuing education course.
   - _____Other—please specify _____.
2. My present technique is:
   Number of specimens
   - _____one slide.
   - _____two slides.
   - _____three slides.
   - _____Other—please specify _____.

   Equipment used (check all applicable):
   - _____Wooden spatula (Ayer) or tongue blade.
   - _____Cotton applicator—dry.
   - _____Cotton applicator—moistened.
   - _____Pipette or aspirator.
   - _____Other—please specify _____.

   My specimen(s) are obtained from (check one or more applicable):

	Type of Applicator Used
_____Vaginal Pool.	_____.
_____External Cervix.	_____.
_____Endocervical canal.	_____.
_____Vagina.	_____.
_____Other—please specify	_____.

3. As I understand it, the reason for obtaining Pap smears by my technique is: _____
   _____.
4. I have_____ have not_____ ever received any comments on my specimens from my pathologist/cytologist.

Thank you very much for your assistance!

were learned than the total number of questionnaires returned. This suggests that some physicians remember learning their technique in more than one period of their medical career. For the Ob/Gyn group, the intern-resident years were the most influential period. Conversely in the FP/GP group, about half of the learning experiences occurred as a medical student or house officer and about half occurred later in continuing education courses or review of the medical literature. The Internist group indicated most of their learning occurred as a medical student or house officer. Age of the respondent is probably a factor in this difference between the groups.

There was a general utilization of two slides for the collection of material sent to the pathologist. A few individual comments indicated that the physician collected two or three specimens and placed them on a single slide, usually on direct suggestion of the pathologist to whom the slides were referred.

Many physicians use more than one instrument for the collection of specimens. Unfortunately, in constructing the questionnaire we did not ask the follow-up questions which would relate type of instrument to the location from which the specimen was obtained.

The figures on specimen location indicate that all physicians obtain specimens from more than one location. Although the vaginal pool is used by 56 of the physicians who responded, it appears that the external cervix or endocervical canal is by far the most popular site for collection of a specimen.

Table 3 indicates that less than one-fourth of the FP/GP group has received some comment concerning the quality of their Pap smears from their pathologist, while one-third of the internists and one-half of the Ob/Gyn group have received comments. We would draw no inference from these figures, but would point out that pathologists have made some helpful comments to about one-fourth of the primary care physicians in this survey.

We next decided to review textbooks and journals in common use looking for a specific description of recommended techniques for obtaining a Pap smear. This proved to be one of the most surprising and interesting aspects of our study. Neither of two standard textbooks[1,2] com-

Table 2

PAP SMEAR TECHNIQUE—COMPARISON BY SPECIALTY

Total Questionnaires Returned:	FP/GP	Int. Med.	Ob/Gyn
A. Learned Present Technique When			
Medical Student	19	11	4
Intern—Resident	12	11	11
Cont. Education Course	15	2	4
Medical Literature	15	5	5
Other	7	3	2
TOTAL	68	32	26
B. Present Technique			
One Slide	8	3	1
Two Slides	48	25	18
Three Slides	2	0	2
Other	0	0	1
TOTAL	58	28	22
C. Equipment Used			
Ayer Spatula or Tongue Blade	51	27	18
Cotton Applicator—Dry	23	13	15
Cotton Applicator—Moist	3	2	4
Pipette or Aspirator	5	2	2
Other	3	0	1
TOTAL	85	44	40
D. Specimens Location			
Vaginal Pool	29	14	13
External Cervix	40	20	17
Endocervical Canal	48	22	20
Vagina	7	2	1
Other	0	0	1
TOTAL	124	58	52

Table 3

PHYSICIANS RECEIVING COMMENTS FROM PATHOLOGIST—CYTOLOGIST

	FP/GP	Internists	Ob/Gyn
Have	10	7	9
Have Not	47	21	9
TOTAL	57	28	18

monly used by medical students in our Medical Center contain a specific description of the Pap smear technique, although both emphasize the importance of routine periodic screening in the physician's office.

Although the medical center library contains many articles documenting and discussing the results of Pap smear screening, we were unable to find a single article (even after a Medlars computer search) written in the past five years which contained detailed instructions for the proper collection of a Pap smear from the uterine cervix! We did find one reference[3] describing the use of the Ayer Spatula alone.

There must be a number of satisfactory techniques for obtaining routine Pap smears in office practice. Probably the most important factor is that the technique used by the primary care physician is one with which both he and his pathologist-consultant are familiar and that both are in agreement that this technique provides satisfactory smears for interpretation.

One technique which is considered satisfactory and currently recommended by pathologists in Central Kentucky is quoted below for the benefit of readers who may wish to reevaluate their own current techniques.

Methods of Collection[4]

"Spatula: The cervical os is scraped 360° with a specially designed wooden spatula described by Ayer or a common tongue blade cut with curved scissors to fit the contour of the cervix. It is important that the scraper fit the external os, which serves as a pivot for rotation. Collected material is streaked rapidly onto a slide and **fixed immediately.**

"Cotton Swab: The entire portio vaginalis of the cervix is swabbed with a [moistened] cotton-tipped applicator stick, introducing the applicator as far as possible into the external os. The collected material is best smeared by rapidly rolling the applicator tip on the slide [and fixed immediately]."

Summary and Conclusions

The routine collection of Pap smears in office practice had now been carried out for about 25 years with generally quite satisfactory results in collection of smears and in early diagnosis and treatment of carcinoma of the uterine cervix. Comments about the adequacy of some specimens made by our consulting pathologist stimulated us to survey and reevaluate our own technique and those of primary physicians in the Central Kentucky area. Evaluation of the responses of physicians and a search of recent medical literature suggest that many physicians continue to use techniques which they were taught early in their careers and that it is difficult to find reference material with which to review and update these techniques. It may be that a technique which is generally accepted and widely used gets the reputation of being simple and reliable and not worth review. However, comments by our own pathologist and a significant number of those physicians surveyed suggest that routine smears are not always satisfactory and techniques deserve periodic review. One currently recommended technique for obtaining satisfactory routine Pap smears in primary care office practice is presented.

Acknowledgement

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Digest* of Proceedings of the Special Session of the HOUSE OF DELEGATES

Ramada Inn, Bluegrass Convention Center, Louisville, Kentucky, February 26, 1976

Carl Cooper, Jr., M. D., Bedford

Speaker of the House, Presiding

Speaker Cooper opened the 125th Meeting of the KMA House of Delegates in "adjourned session" at 1:15 p.m. and asked Paul J. Parks, M.D., Bowling Green, to give the Invocation. He then called on Carl H. Scott, M.D., Lexington, Chairman of the Credentials Committee, to give the report of the Credentials Committee. Doctor Scott reported that a quorum was present.

The Speaker then introduced Mr. Carl Wedekind of Louisville, KMA's Legal Counsel, and Mr. Bill Doll of Frankfort who has been retained by KMA to assist in lobbying efforts during the 1976 Kentucky General Assembly.

Following routine announcements, Doctor Cooper expressed special thanks to Ballard Cassady, M.D., Pikeville, and Tom Marshall, M.D., Louisville, who were KMA representatives on the Governor's Committee on Hospital and Professional Liability Insurance.

At this point, the Speaker called on David A. Hull, M.D., Lexington, for the Report of the President. (Doctor Hull's address is printed in its entirety as follows:)

Report of the President

Mr. Speaker, members of the House, and guests. As you know, at our Annual Meeting in September we spent considerable time and effort, both in the Reference Committee meetings and on the floor of the House, in discussing proposed legislative remedies for the increasing problem of the availability and cost of medical liability insurance. Out of those discussions came a number of points for possible reforms which were approved by the House of Delegates.

At the conclusion of our Annual Meeting, the Board of Trustees and the Legislative Committee were given rather broad authority to push for the adoption of as many of these individual points as was feasible under the circumstances. Rather than adjourn that Annual Session, it was determined that we be in recess for a recall, such as we are having this afternoon. The purpose of this recall is not in the nature of a distress signal, but rather is to give me, your other officers and the Board of Trustees an opportunity to report to you on events as they have occurred and to seek your counsel and your support in regard to the proceedings yet to come.

The legislative reforms outlined by the House of Delegates were ably proposed and fought for by our representatives on the Governor's Task Force, Doctors Tom Marshall and Ballard Cassady. Literally scores and scores of meetings—morning, luncheon, night and weekend meetings—were held until finally, both a majority report and a minority report were issued by the Governor's Task Force. Those recommendations were taken under consideration by the Governor and his staff.

The deliberations and consultations within the Governor's office and with key leaders in the Legislature went on for a number of weeks. Again the process of education, consultations, explanation, and pure lobbying took place in more and more countless meetings. During all of this time your Board of Trustees, Executive Committee, Quick Action Committee, and Legislative Committee have been kept informed, have participated, and have had the maximum amount of input possible into the structuring of the Administration's Liability Insurance proposal.

From this long and detailed legislative process has come an Administration Bill, Senate Bill 248, constructed by Governor Carroll and his advisors, embodying the main points of the Report of the Governor's Task Force.

Let me point out now that KMA could have introduced its own bill the first day of the session. However, serious in-family discussions overwhelmingly convinced us that the best bet for the profession was to expend every ounce of energy in fighting our cause in an Administration Bill. It doesn't take much political savvy to understand that the Governor has full control of this General Assembly, and we would come out much to the better through influencing his legislation rather than going to war with our own.

As a result, we have, in the Board's opinion, a very significant piece of legislation to build upon in the future.

No state, of course, knows the real answer or else we would all get on the same bandwagon. Time will only tell.

Each of you has a copy of Senate Bill 248 and let us go over briefly the proposals that are contained in the Governor's package.

The first two pages are what is referred to as the "Whereas Clauses" which set forth the public purpose for which the proposals are being enacted. In Section 2 on page 3, there commence the definitions of "Health

**Editorial Note: A tape recording was made of the special session of the House of Delegates, and any member who desires to examine the transcript of these proceedings may visit the Headquarters Office and listen to the recording.*

Care Provider," and all the other major terms used in the Act. You will note in reading these definitions that they are purposely made broad in nature and in many instances are all-encompassing.

Section 3 on page 5 provides for the removal of the "Ad Damnum" Clause and any prayer for damages in a medical liability suit. No longer will it be possible for the media to broadcast some boxcar figure that has been named in a suit against a doctor or hospital. The claimant and his attorney may only ask for fair and reasonable damages, and may not specify any precise amount.

Section 4 of the Act, commencing on page 5, permits advance payments to be made by the insurance carrier on a claim where it will be beneficial to do so. This section provides that any such advance payments cannot be used in evidence to show any admission of liability on the part of the carrier or the physician involved. The remainder of Section 4 provides for the credit to be given on the ultimate settlement or award for the advance payments that have been made.

Section 5 of the Act, commencing on page 6, permits the apportionment of damages in any suit in which more than one health care provider is a defendant concerning a single alleged injury. This means that verdicts for a claimant need not be joint and several against all defendants but can instead be set by the jury in an actual percentage of involvement.

Section 6 of the Act, on pages 6 and 7, is the Statute of Frauds section, and provides that no physician or other health care provider is liable upon any guarantee or assurance of results unless such guarantee is given to the patient in writing and signed by the physician, or unless the alleged breach is proven to be "willful or wanton."

Section 7 of the Act provides for the reporting to the Commissioner of Insurance all malpractice claims settled or adjudicated to final judgment. The information which will be compiled by the Commissioner will give us a basis over the next several years to learn a great deal more about the nature and extent of malpractice claims in Kentucky.

Section 8 of the Act commencing at the bottom of page 8 relates to the problem of "Informed Consent." Subsection 1 sets forth the test to be applied to the health care provider, and subsection 2 sets forth the law to be applied to the patient. These two sections are an attempt to codify the law relative to Informed Consent to lessen the possibility of ever-broader interpretations being made by the courts. Subsection 3 simply eliminates the emergency situation from the requirement of a previous consent for treatment.

Section 9 of the Governor's proposed bill relates to expert testimony and requires that anyone testifying as an expert must be a licensed practitioner active in the specialty which is the subject matter of the suit, and he was so active during the year immediately preceding the time of the alleged occurrence. It is further provided in Section 9 that what is relevant is the standard of care at the time of the alleged occurrence, rather than some subsequent standard of care later developed. These requirements and restrictions on who is truly qualified to be an expert witness again is a significant improvement in the law.

Section 10 of the Act is the Confidentiality provision. It amends the existing law, KRS 311.377, which grants immunity from suit to those serving on peer review type bodies, and adds to that the immunity of the proceedings and records of any peer review committee as broadly defined from being subject to discovery, subpoena, or introduction into evidence in any civil or administrative proceedings. It further prohibits any person participating in such peer review board from being required or permitted to testify in any civil action or administrative proceeding as to any testimony, evidence, or other matters produced in the peer review proceedings. The only exception made to this rule is for professional disciplinary proceedings such as appeals from hearings before the Kentucky State Board of Medical Licensure. The matters contained on page 13 that are in parenthesis show the way KRS 311.377 read prior to its being amended.

Section 11 of the Governor's Bill commencing on page 13 creates the Kentucky Patients Compensation Fund. Subsection 1 provides that the Compensation Fund shall be held within the Department of Insurance in a trust and agency account. Subsection 2 requires that every physician licensed and practicing in Kentucky and every hospital located in Kentucky shall be members of the Fund. Any other health care providers do not have to, but may be members of the Fund with the approval of the Commissioner of Insurance. Physicians who by reason of having a limited practice or of some other special circumstances may be excluded by the Commissioner from participation in the Fund. Subsection 3 requires each member of the Fund to carry professional liability insurance with coverage of $100,000 per occurrence and $300,000 in the aggregate for claims in one year. It is not required that you purchase commercial insurance if you can qualify as a self-insurer under provisions similar to those set up under the mandatory insurance provisions of the no-fault automobile law. Subsection 5 provides that each member of the Fund shall pay an annual assessment, and in the case of physicians this assessment will be 10% of their annual premium for the $100,000 and $300,000 liability insurance, or if they are self-insured, 10% of the average premium that they would have paid had they not been self-insured. For hospitals, the mandatory assessment will be $50 per bed.

We are advised that under this assessment system, there will be collected between $700,000 and $800,000 from physicians and a like amount from hospitals, which will create a fund of between $1,500,000 and $2,000,000 during the initial period of the Fund.

Subsection 5 permits the Patients Compensation Fund to provide the basic $100,000—$300,000 of coverage to a limited number of physicians who are otherwise unable to acquire such insurance on the private market.

Subsection 6 provides the basic purpose of the Patients Compensation Fund, which is to be responsible for any judgments or settlements against a physician or hospital, or other member of the Fund, in an amount in excess of $100,000 on any one claim, or $300,000 in the aggregate during any one year. This, in effect, is an umbrella policy which will be available to all physicians and hospitals.

Subsection 7 (b) provides that any claimant who has a judgment or a settlement in excess of $100,000 shall file his claim with the Patients Compensation Fund for

such excess. There is a limitation placed on the Fund in regard to any one claim that an amount in excess of $1,000,000 may not be paid out in any one year.

In the event that claims on the Patients Compensation Fund are in excess of its reserves, Subsection 7 (c) provides that funds will be available from the general funds of the Commonwealth of Kentucky on a loan basis, to be paid back at some future time and bear legal interest. Subsection 8 provides that any physician or hospital which does not obtain the requisite insurance coverage, or does not pay the annual assessment for the Patients Compensation Fund when due shall be reported to the State Licensure authorities for hearings for the enforcement of the provisions of the Act.

Finally, Section 12 on page 20, provides that the Act will be effective as of July 1, 1976, and shall apply to acts of malpractice occurring after that date.

Now, as you can see and hear, the substance of much of this legislation is long, involved, and technical in its nature.

Having summarized the basic provisions of the Governor's legislation, let's take a look at those items which in our meetings in September were considered to be helpful and were proposed but ultimately are not contained in the Governor's legislation.

The first item is the provision relating to the recovery of damages from a collateral source. Upon reflection by the Board of Trustees, it was determined that any individual who, through his own insurance and efforts, had protected himself from losses should not be penalized for his having additional insurance. Accordingly, the Executive Committee of the Board of Trustees voted unanimously to withdraw that recommendation when the matter was still before the Governor's Task Force.

The second point relates to Res Ipsa Loquitor and the proposal that this be removed from the law as it pertains to medical malpractice cases. We were successful in obtaining such a provision in the Governor's Task Force, but the Governor, his advisors, and legislative leaders, would not agree to support such a provision in the current Legislature.

The next item is the proposed change in the statute of limitations to make it applicable to minors commencing at the age of six. This, also, the administration would not agree to. It was thought not advisable to insert it in the legislative package. There were two basic political thoughts behind this decision. First was the recognition that Kentucky has one of the best and strictest statutes of limitations of any state in the country, and it is widely felt that to open up the subject of the statute of limitations is more likely to produce a liberalization of the current statute than to produce the actual change being sought. For years, there has been a repeated effort in the Legislature to change the statute of limitations from a basic one year to a three-to-five year statute as exists in many other states. In addition, the problems caused to physicians, particularly pediatricians, by the statute not running until a minor reaches his majority and one year thereafter, as compared with the equities of the minor who is injured and upon reaching his majority is denied his right to suit for a grievance which occurred while he was a minor. It was felt that it was as important to protect the rights of these minors as it was to undertake to alleviate the medical problem.

The statute of limitations problem for minors, however, is addressed in the Governor's package. The reiteration of the requirement that expert testimony relate to the standard of care at the time of the occurrence and the fact that the expert testimony must be provided by someone who has practiced one year prior to the occurrence will be helpful in cases as are currently being brought in Northern Kentucky and Ashland involving blindness caused by 100 percent oxygenation given at birth to "premies" 15 to 20 years ago.

The next item is our proposed limitation on lawyers' contingency fees. This the administration would not agree to, and we must admit to you that there are some in our own ranks who are much bothered by this proposal. It is not difficult to see that once we have opened the door for the legislative control of attorneys' fees that there will be additional proposed legislation for greater control over physicians' fees.

A pre-trial screening panel was seriously considered, but the disappointing results of such panels in other states, and particularly the difficulties now being experienced in Tennessee, caused us to determine we would be better off in Kentucky without such a panel.

A limitation on the amount of an award that could be given in a medical malpractice case was also discussed, and because of the very serious constitutional questions that such legislation poses, this proposal was not included in the Governor's Task Force nor in the Administration's Bill. It is worthy to note that in most states where there has been a limitation placed on the amount of the award, it has already been held to be unconstitutional or is under attack.

A Joint Underwriting Association proposal which would provide the Commissioner of Insurance with the authority to create a Joint Underwriting Association in the event that liability insurance should become unavailable, was recommended by the Task Force and has been introduced separately by the Administration as Senate Bill 249.

Consideration of a KMA-sponsored or controlled insurance company is currently under investigation and reports to you concerning this will be forthcoming.

As the political process is involved, there has been a give-and-take of conflicting interests, new ideas presented, and compromises made. Such is the "art of politics." Certainly, the odds were never good that we would obtain the backing of the General Revenue of the Commonwealth of Kentucky for the Patients' Compensation Fund, but Doctors Marshall and Cassady were successful in establishing this principle in the Task Force and our lobbyists have been able to keep this principle viable in the Governor's legislation.

There were other areas where we were not successful. Of concern to many of you was the mandated forced participation. It was the expressed intention of the House of Delegates to have participation in the Compensation Fund as one of election rather than being mandatory. This position was held long and hard during many sessions with the Governor's Task Force and, subsequently, with the Administration, but ultimately every member of the Governor's Task Force and the Governor's advisors, with the exception of the two physician members of the Task Force, were adamant that participation had to be mandatory. Their point was that if participation

was voluntary, the Fund could not be fiscally sound. Those in the high risk category would all be pleased to join and many of those in the low risk categories would perhaps not wish to participate. When the hospital representatives agreed that it would be mandatory for their participants, and it was clear that we could not win this argument, our representatives sought to obtain other relief to ease the problems created by mandatory membership.

It is through these efforts that we obtained authority for self-insurance and excuse under certain circumstances for individual physicians. So far as enforcement is concerned, final jurisdiction will rest with our own State Board of Medical Licensure which is composed of our peers.

That section of the majority report of the Governor's Task Force dealing with the establishment of a sliding scale for lawyers' fees was deleted from SB 248. It was pointed out by the Governor and his advisors that this would be objectionable to many and strongly resisted in the General Assembly and would, in fact, jeopardize the whole bill. In addition, many individual physicians felt as though such a recommendation coming from organized medicine would only give justification for future legislation which might be passed for suppression and control of the physicians' fees. Therefore, acquiescence on this point was given, although realizing that many of you feel strongly about this matter.

This is my report to you of where we are at this time. Your Board of Trustees has considered all of these matters repeatedly and at great length, and at their meeting on February 19th unanimously voted to support each item in the Governor's proposed bill, with the exception of those provisions relating to review by the Claims Board, which we are advised are being reconsidered by the Administration. The Board also unanimously authorized me as your President to issue the following statement to the Governor of Kentucky and to the press. This step was necessary because the Governor prior to the introduction of the bill specifically asked our position on its contents.

The statement reads as follows and has previously been sent to you.

> *Doctor David A. Hull, President of the Kentucky Medical Association (KMA), announced today that the Governor's Bill on the Medical Liability Insurance crisis (Senate Bill 248) has been received and reviewed by the Board of Trustees of the KMA.*
>
> *Doctor Hull stated, "It should be noted first that Governor Carroll has been concerned about the Medical Liability Insurance crisis for a considerable period of time and has acted forcefully in the establishment of the Governor's Task Force to study the problem and make recommendations. The Governor has demonstrated concerned leadership in proposing the legislation contained in Senate Bill 248 and undertaking to avert a disaster for health care in this state."*
>
> *"The House of Delegates of KMA, its chief policy-making body, will review the proposed legislation and make its recommendations at a meeting within the next few days," according to Doctor Hull.*
>
> *"It is the recommendation of our Board of Trustees to the House of Delegates that we support the Governor's Bill," Doctor Hull added. "In the opinion of the Board of Trustees, it is in the best interest of good health care for everyone to support the principles the Bill sets forth, and we will urge that all physicians and their patients support the Bill and urge their Legislators to do likewise.*
>
> *There is included in Senate Bill 248 a provision for review of settlements by a court of claims (Section 7(3)(a-d) which was not considered by the Governor's Task Force and is a new proposal which we feel must be studied by the Board of Trustees and the House of Delegates before further comment can be made," the KMA President said.*
>
> *"Medical Liability Insurance is a consumer problem," Doctor Hull reiterated, "and the public must see that it is resolved before it reaches epidemic stages in Kentucky."*

Your officers and other members of the Board of Trustees realize that at our Annual Meeting in September 19 points were suggested as being a part of any legislative package on liability insurance. We have attempted to carry out your desires and, in our opinion, have done so in principle. Individual points as previously outlined have been deleted or altered because of constitutional or political reasons but in the main, your wishes have been met.

Experts who view the malpractice scene nationwide have reviewed this proposed legislation and say this embodies one of the most comprehensive packages of proposed solutions that have been considered in any state to date. I say again that the plain truth of the matter is that no one knows. There has not been enough experience under any of these proposals for anyone to know whether or not they will truly help the malpractice liability insurance problem. Certainly, no one is saying that they are going to reduce your premium in the immediate future, if at all. But we do feel that it is a start. We feel that we have gotten the attention of the powers that be, and that they know we can exert some muscle and some influence when we make up our mind to do that. We truly hope that all of these hours, all of this effort, and all of the expenditure of our funds, will be beneficial and rewarding to us.

The final question is where do we go from here. You have given to the Board of Trustees the authority to make a determination as to whether or not to introduce separate legislation covering those points which we have considered in the past and which were not included in the final package.

This the Board of Trustees has done and it is their determination, again unanimously, that no additional legislation should be introduced. The basic reasoning behind this is the obvious fact that insofar as the Governor and the Administration are concerned, they will not support any additional legislation. These points have in the past been thoroughly argued and considered and the resulting legislation contained in the Governor's Bill is what he and his advisors and Administrative leaders will agree to support. So, if we introduce separate legislation, it will be up to us to overcome the opposition of the Administration and also we must face the possibility of offending many of our friends in the Legislature who already think we are getting some very special attention and treatment, and who may well resent our asking for

additional legislation at this time. It is our recommendation to you that we wholeheartedly support the Governor's proposed Bill and give it every backing that we can in every way that we can, and at this Legislature we do not undertake to introduce any additional measures in regard to the malpractice insurance question, but hold them for future consideration at a subsequent legislative session.

I have asked the Speaker of the House to call you back into session in accordance with the recess in September so that this full report could be given to you. I know that we have innundated you with information over the past six weeks as to all of the developments in the structuring of this legislation, but in these times you have not only the absolute right, but the absolute need to know what is going on in these fields.

I know many of us would like to have seen us get more in our package at this time, and on the other hand, many of us frankly are surprised that we have done as well as we did. We are here to receive your comments, to receive your suggestions, and to answer as best we can your questions concerning any matters contained in the legislative package and any matters relating to the malpractice insurance problem.

It is, of course, easy to be negative—to be opposed; and it is easy to wait and let the other fellows do all the work and then come up with a last-minute suggestion. It is easy to be a splinter group. But our responsibility, as representatives of organized medicine, is to work the thing through as best we can and present it to you for your consideration. We want you fully informed, and through your knowledge and insight we hope to receive your full support.

In closing, let me again express my deepest gratitude to Doctors Tom Marshall and Ballard Cassady for the hours—and miles—they have put in for all of us. To each of you my thanks for your patience, your understanding, your support, and participation that has brought us where we are.

Thank you very much.

The Speaker thanked the President for his remarks, and opened the floor to a question and answer session. Wyatt Norvell, M.D., Delegate from Henry County, was recognized and moved that the recommendations of the President and the Board of Trustees concerning Senate Bill 248 be accepted and implemented. W. E. Becknell, M.D., Delegate from Clay County, seconded the motion and commended all those who had worked on the formation of this bill. On a call for the vote, the motion carried unanimously.

Lee C. Hess, M.D., KMA Past President, was recognized by the Chair and inquired if the Board of Trustees had considered the possibility of an emergency clause being added to Senate Bill 248 which would change implementation of the Act from July 1 to an earlier date. Such a clause, he felt, would be beneficial to a large percentage of Kentucky physicians whose umbrella policies are renewed in May.

Mr. Wedekind replied that unfortunately the date of July 1 was suggested by the Insurance Commissioner to allow adequate time to make all necessary changes within the Insurance Department. He stated, however, that KMA officers would address themselves to this suggestion.

Mr. Wedekind, in response to another question, stated the severability clause had been removed from the bill, but KMA was going to request that it be reinstated. It was noted the Committee on Judiciary-Statutes would be meeting Tuesday, March 2, to consider liability insurance legislation.

Doctor Parks as President-Elect was recognized to give the report of the Board of Trustees. He read the following Resolution and moved for its adoption. The motion was seconded by Thomas L. Heavern, Jr., M.D., Highland Heights, and on a call for the vote, carried unanimously.

Resolution

KMA Board of Trustees

WHEREAS, the KMA House of Delegates, meeting in adjourned session on the 26th of February, 1976, did review the legislative proposals in Senate Bill 248 and Senate Bill 249 currently before the Kentucky General Assembly, and

WHEREAS, the KMA House of Delegates takes cognizance of the diligence, dedication and desire of the members of the Governor's Committee on Hospital and Physicians' Professional Liability Insurance to find a solution to the medical liability problem, and

WHEREAS, the Kentucky Medical Association House of Delegates has recognized medical liability to be a multi-faceted problem that affects physicians and hospitals in particular, but recognized further that other health care providers, as well as society as a whole, are adversely affected by this current situation, and

WHEREAS, after due deliberation on other proposals currently before the Kentucky General Assembly, the House of Delegates of the Kentucky Medical Association expresses its sincere thanks to the Governor, Legislators and others who have helped in a time of dire need, and

WHEREAS, the House of Delegates of the Kentucky Medical Association appreciates the efforts of **all** who have offered constructive thoughts toward the solution of this great problem; however, the House of Delegates of the Kentucky Medical Association feels that the issues most germane to the medical liability problem were covered in depth by this House of Delegates in September of 1975, and further refined, studied, amended, deleted and modified by the Governor's Committee on Hospital and Physicians' Professional Liability Insurance only after long discussions and much thought, and

WHEREAS, Senate Bill 248 and Senate Bill 249 currently before the Kentucky General Assembly embodies the spirit, the content and the intent of the report of the Governor's Committee on Hospital and Physicians' Professional Liability Insurance, now therefore be it

RESOLVED, that this House of Delegates of the Kentucky Medical Association does commend the Governor (The Honorable Julian Carroll), the Commissioner of Insurance (The Honorable Harold McGuffey), the members of the Governor's Committee on Hospital and Physicians' Professional Liability Insurance and others who have worked in developing Senate Bill 248 and Senate Bill 249 for their efforts and support on behalf of all Kentuckians, and be it further

RESOLVED, that this House of Delegates of the Kentucky Medical Association reaffirms the Board of Trustees' actions and recommends passage of Senate Bill 249 and Senate Bill 248 with the exception of the provisions of 7 (3) a-d and other references made to the review of claims by the Board of Claims which justifies further study, and be it further

RESOLVED, that the House of Delegates of the Kentucky Medical Association requests consideration and passage of Senate Bill 248 and Senate Bill 249 as soon as is possible, and finally be it

RESOLVED, that copies of this resolution be sent to the Governor, the Commissioner of Insurance and every member in the 1976 General Assembly with our sincere thanks for their efforts and support in our behalf.

* * * *

There being no further business relating to medical liability to come before the House of Delegates, the Speaker announced that in accord with the KMA House of Delegates resolution adopted at the annual 1975 meeting this session would *"Stand in Adjournment,"* and noted the House of Delegates may need to again be called into another *"Meeting in Adjourned Session."*

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EDITORIAL

Caveat Vendor

A very good friend and colleague gave me Robert and Suzanne Massie's book *Journey,* a story of their lives and hard times caring for and rearing a hemophiliac son. The book is grippingly interesting for many reasons: Robert Massie was born in Lexington, Kentucky, his father had a school for boys near that city, he is the nephew of a prominent Lexington surgeon, Francis Massie, and there are many threads of medical interest woven into each chapter. Most impressive was the repetitive criticism this perceptive and gifted couple had for our profession, paramedical personnel, hospitals, and medical insurance companies. They write of our impatience, lack of understanding and compassion, failure to communicate, and overwhelming psychological dominance of most patients. These parents and their hemophiliac son were frequently victims of rudeness and they recall curt answers from hospital personnel, the smirk of head nurses, and the cold-eyed resident physicians. They were aware of hospitals with rigid and arbitrary rules that caused agonies of waiting and indecision plus the heartlessness of routines that are dehumanizing. Their disenchantment with medical insurance companies was vehemently manifest in that the companies "exclude exactly the people who need help most, seeking people they consider 'best risks'." In some fairness, the authors recognize many fine qualities of individual physicians, but cite the American Medical Association as a villain and add "the consumer, and the government in our behalf, have no right at all to say how medical care shall be dispensed, or to whom, or what it will cost. In medicine there is no free market."

Such observations and accusations, if true and if widespread, become concerns of ours and consumer advocate groups. Does the patient—the consumer—have rights and are there supporters of these rights? The answer is yes! A consumer revolution is at hand and its great surge came in 1963 with the Consumer's Bill of Rights out of President John F. Kennedy's Consumer Advisory Council. Protection and influence of the individual was uppermost: the rights of safety, to be informed, to choose, and to be heard. Since then our consumer has been given many new aids and advantages as he enters the health arena seeking the services of the providers there. These include a Society of Patient Representatives with Secretary and Staff housed in the commodious American Hospital Association offices just off Chicago's Magnificent Mile. They are the patient advocates, ombudsmen, and ombudswomen, the latter exemplified in the person of Jenrose Martin at the Norton-Children's Hospital in Louisville whose role as specialist in patient's complaints was covered interestingly in the September, 1975, issue of *Prism.* To be effective in pursuing patient interests this group wants complete access to all medical records, the privilege to call qualified consultants, ex-officio participation in hospital committees related to quality care, access to all patient support services, and independence to function without hospital administrative direction.

More too! There is a Patients Advocacy Legal Service in St. Louis; Ralph Nader's Health Research Group has prepared a consumer guide to psychotherapy, "Through the Mental Health Maze" (Nader's guide to shrinks?); and there has been a great effort to create a federal Consumer Protection Agency. There are shocking reports that pseudo-patient techniques are being employed to assess the quality of patient care wherein laymen are trained to simulate diseases and with this dramatic expertise gain admission to hospitals and physicians' offices to make medical care appraisals. Add to this the Patient's Bill of Rights, developed and approved by the American Hospital Association in 1972, that lists 12 items designed to contribute to more efficient patient care and greater satisfaction for the patient. The legislature in the State of Maryland urged all hospitals to endorse this bill and Minnesota has adopted an eight-point bill of rights (similar to the AHA document) which became law in August 1973. Our Governor Julian Carroll said[1] he supports a bill requiring "public representation on all boards" that regulate industries and professions so that consumers "will be informed and involved in

decisions relating to the regulation of business." The well known and oft-publicized Insurance Commissioner for Pennsylvania is in the act also with his "Citizens Bill of Rights: What the Patient and the Public Should Expect of Our Hospitals." At the Beth Israel Hospital in Boston a patient can dial CARE on any telephone—24 hours a day, seven days a week—and reach hospital administration to ensure the services he requires according to his rights and reasonable expectations. Some hospitals have hired full-time patient advocates in social workers and law interns.

With such an impressive array of assistance the patient will be well represented as he should be; his complaints will be heard and resolved! But what of the patient's compliments for the physician, the nurse, hospital employee, house officer, or even the medical insurance company? Will this be given equal consideration, study, and action? In striving for patient's rights and better patient care will the good points be added as the bad points are subtracted? If we (in solo, group or partnership) or a hospital adopt the policies in the bill of rights, can that fact be introduced as evidence in a court to aid a jury in determining the standard of care? Will there now be more litigation in a society already litigious? The emphasis has shifted: from the buyer (consumer-patient) beware to the seller (provider-physician) beware! JSL

1 As reported in the Courier-Journal, Saturday, January 24, 1976.

Notice To Contributors

Members of the Kentucky Medical Association reading papers before other organizations are asked to submit their papers to *The Journal* for consideration by the Editors for publication. Detailed instructions to contributors appear in the Scientific Section of *The Journal* under Manuscript Memos. Please forward any papers to:

Paul C. Grider, Jr., M.D., Scientific Editor
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Louisville, Kentucky 40205

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FROM THE EDITOR'S NOTEBOOK

Notes of medical and professional interest from a cross-section of America's journals.

PUMCODOXPURSACOMLOPAR

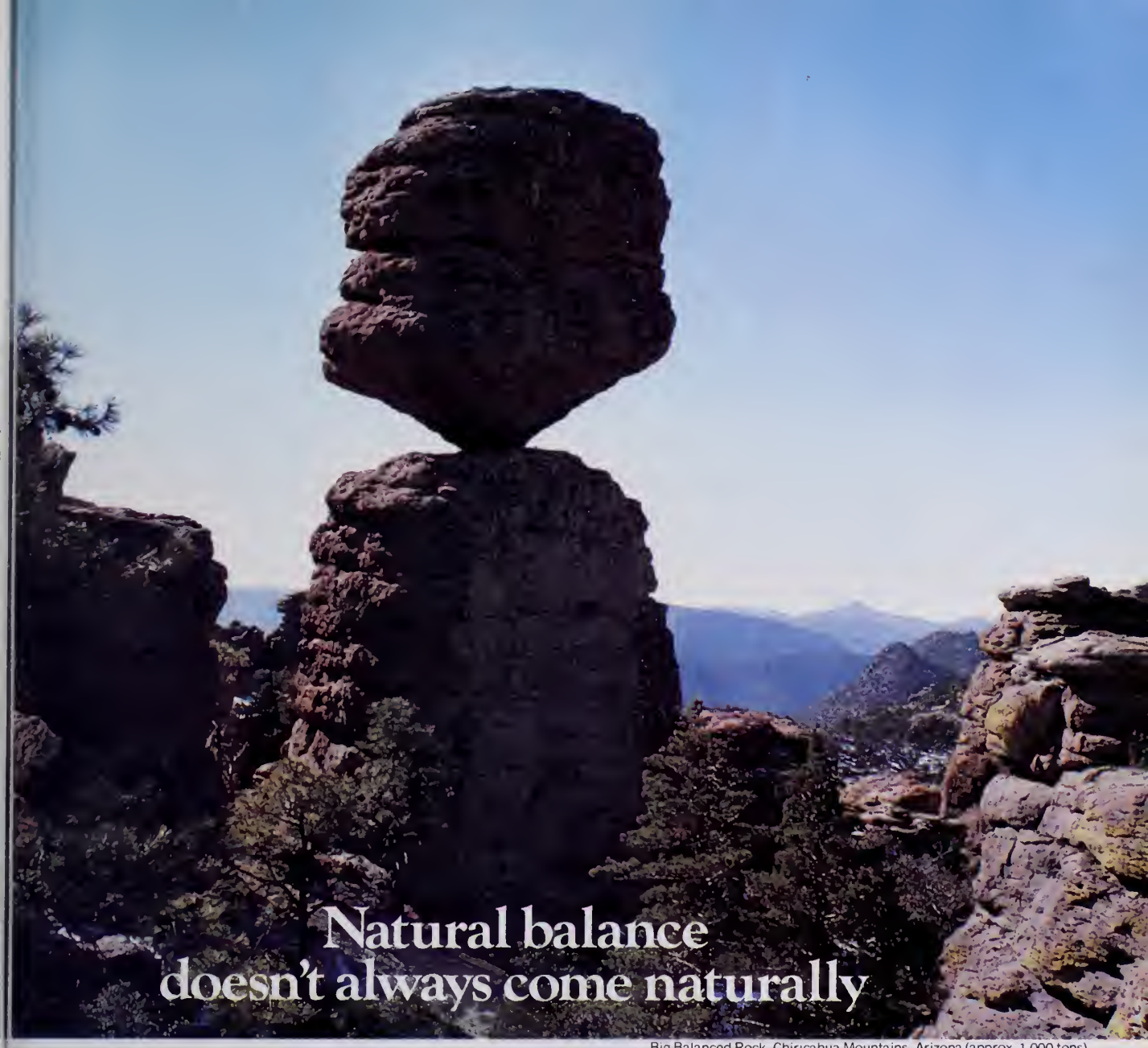
In the editorial CME by AEO in the FEB issue of this publication of KMA, The Louisville Area Continuing Medical Education Consortium came under attack in paragraph four: "despite the **oversight** that the initials did not spell anything." Failure to spell something, AFFirmative! But oversight, NEGative! Members of the STECO (Steering Committee) spent much time and great effort in an attempt to formulate a SAMERA (suitable, appropriate, meaningful, easily remembered acronym) but the formulations were always too LAME or much too LACEy. Besides organizations can survive—even flourish—without an acronym and carelessly developed acronyms may become embarrassingly troublesome. I remember the American Radiator and Standard Sanitary Company, now listed in the telephone book as American-Standard. Surely there are some who recall SNAFU, coined during World War II, and others equally unsavory as CREEP (Committee to RE-Elect the President), FOP (Fraternal Order of Police), POX (point of exit—used in describing penetrating injuries) and ASS (anterior superior spine). A few smokers of cigarettes responded scathingly and scatologically to GASP (Group Against Smoker's Pollution) by forming a counter-group called Smoking Helps Inhibit Tensions. Perhaps it is a fine thing that the Consortium remains acronymless!

The medical profession has many initials, abbreviations and acronyms—almost as many as the U.S. Government! Usually an initial is followed by a period if it is the first letter of a name and Harry S. Truman, 33rd President of the U.S., should have dropped the period following his S since he had no middle name. C H Richardson, Jr., a prominent Louisville attorney, forbids the use of periods after the C and H in his name since neither are the first letter of a name nor an abbreviation. An acronym is a pronounceable word made up of the first letter or letters of a name, a product, an organization et cetera. (The last two Latin words may be abbreviated etc.) Initials, abbreviations and acronyms are all mnemonics (Mnemosyne, goddess of memory) and who doesn't remember those that rhymed in medical school days for recalling cranial nerves and the small bones of the hand.

Ellen T. Crowley has edited (1975) a new book, *New Acronyms and Initialisms,* available for $30.00 from the Gale Research Company. It represents a supplement to the *Acronyms and Initialism Dictionary.* Avice H. Kerr has an interesting volume, *Medical Hieroglyphics, Abbreviations and Symbols* (Clissold Books, Chicago, 1970) that helps solve some of the "puzzlers" in consultations, progress notes, history and physical examination write-ups by colleagues, medical students and house officers. William R. Espy tells us in his *Words at Play* (Clarkson N. Potter, Inc., Publisher) that MAFIA abbreviates for "morte Ai Francesi gl'Italiana Anelo."

Most of us are initialers, abbreviators and acronymyzers and we know about PERLA, ACTH, HEW, RISA and JAMA, but what of ECHO (enteric cytopathogenic human orphan) virus and GNID (gram negative intracellular diplococci). There is a PIE (pulmonary infiltrate eosinophilia), a BUN and a DIP (desquamative interstitial pneumonaia). APE (anterior pituitary extract), ARF (Arthritis Rheumatism Foundation), ANT (2 amino 5 nitro thiazol) and BOW (bag of waters) are TOPS (take off pounds sensibly) on the PAD (phenaceten aspirin de-oxyephedrin) or on the OASIs (Old Age Survivors Insurance). WOE (wound of entry) is excessive GAS (General Adaptation Syndrome) if it is AREXED by MOM (milk of magnesia). We can SIT (semel in die or once a day) in the TOWER (Testing Orientation and Work Evaluation for Rehabilitation) and SEE (scopolamine eskadol ephtonin) the SAD (sugar acetone di-acetic acid test) WAR (Wasserman antigen reaction) and SOB for our PAL (posterior axillary line) PAT (paroxysmal atrial tachycardia). The oncologists WHO (World Health Organization) have FACTs (Flanagan Aptitude Classification Test) know well about MOPP and COPP and easily HOP (high oxygen pressure) to use the CAVe. But the real CHAMPUS (Civilian Health and Medical Program for Uniformed Services) is not AMPAC nor KEMPAC, not USAN (United States Adopted Names) nor USUHS (United Services University of Health Sciences) but the title of this portion of ENB (Editors Notebook). I read in the *Smithsonian* for February 1976 that *Science News* (Volume 108, Number 24) found this long one in a Hughes Aircraft publication and it stands for: pulse modulated coherent Doppler-effect X-band pulse repetition synthetic-array pulse compression side lobe plane-array. Whew, now ERV (expiratory reserve volume), how is it with you?

We note with interest and pride under Personnel Actions in the University of Louisville magazine, Potential, Volume II for 28 January 1976: "Changes: G. Randolph Schrodt, M.D., from acting chairman to Chairman of the Department of Pathology, as of February 1. Congratulations to our fellow editor!



Big Balanced Rock, Chiricahua Mountains, Arizona (approx. 1,000 tons)

nd useful in the management of vertigo* associated with
es affecting the vestibular system.
relieve nausea and vomiting often associated with vertigo.*
al adult dosage for Antivert/25 for vertigo:* one tablet t.i.d.
available as Antivert (meclizine HCl) 12.5 mg. scored
, for dosage convenience and flexibility.
ivert/25 (meclizine HCl) 25 mg. *Chewable* Tablets for
t, vomiting and dizziness associated with motion sickness.

UMMARY OF PRESCRIBING INFORMATION

CATIONS. Based on a review of this drug by the National Academy of
es—National Research Council and/or other information, FDA has classified
dications as follows:
ctive: Management of nausea and vomiting and dizziness associated with
n sickness.
ibly Effective: Management of vertigo associated with diseases affecting the
ular system.
al classification of the less than effective indications requires further
igation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

Antivert®/25
(meclizine HCl) 25 mg. Tablets
for vertigo*

Effectiveness across the spectrum of most common forms of insomnia

Awake too long, awake too often, awake too early...

These are the most common forms of insomnia, and may occur singly or in any combination. The night of troubled sleep depicted here comprises all three types. As the night progresses from left to right, each sleep stage is identifiable by its own shade of gray. Blue represents "Awake."

As you can see, this hypothetical "patient" takes well over an hour to fall asleep, awakens several times during the middle of the night and awakens too early in the morning.

Sleep Stages

- Awake
- REM
- Stage 1
- Stage 2
- Stage 3
- Stage 4



The insomnias most often curring in young and older adults

For patients with trouble falling asleep mmon in young adult insomnia patients), lmane (flurazepam HCl) 30 mg provides sleep hin 17 minutes, on average. For those with uble staying asleep or sleeping long ough (common in those over 50), Dalmane ers increased total sleep time with fewer cturnal awakenings. These clinical results re demonstrated in studies conducted in ır geographically separated sleep earch laboratories.[1-4]

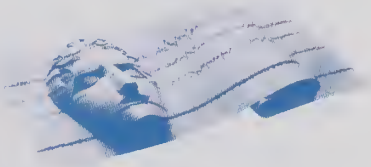
The relative safety of Dalmane (flurazepam HCl) is well documented

Dalmane (flurazepam HCl) is relatively safe and well tolerated; morning "hang-over" has been infrequent. The usual adult dosage is 30 mg; in elderly or debilitated patients, limit initial dosage to 15 mg to preclude over-sedation, dizziness or ataxia. Caution patients about possible combined effects with alcohol and other CNS depressants.

Broad-spectrum medication for the most common forms of insomnia



wake too early



Dalmane®
(flurazepam HCl)

One 30-mg capsule *h.s.*— usual adult dosage
(15 mg may suffice in some patients).
One 15-mg capsule *h.s.*— initial dosage for elderly or debilitated patients.

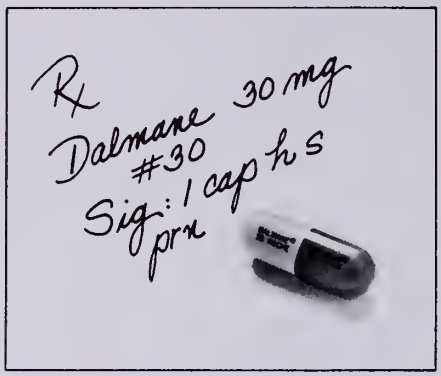
- □ induces sleep rapidly
- □ reduces nighttime awakenings
- □ lengthens total sleep time

ROCHE

Please see following page for a summary of complete product information.

Broad-spectrum medication for the most common forms of insomnia

Dalmane®
(flurazepam HCl) ℞ IV



Objectively proved in the sleep research laboratory, Dalmane

- induces sleep within 17 minutes, on average
- reduces nighttime awakenings
- provides 7 to 8 hours sleep, on average, without repeating dosage

Before prescribing Dalmane (flurazepam HCl), please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase. Paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, have al: been reported in rare instances.

Dosage: Individualize for maximum be effect. *Adults:* 30 mg usual dosage; 15 r may suffice in some patients. *Elderly o debilitated patients:* 15 mg initially unt response is determined.

Supplied: Capsules containing 15 mg o 30 mg flurazepam HCl.

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1. Karacan I, Williams RL, Smith JR: T sleep laboratory in the investigation o sleep and sleep disturbances. Scientifi exhibit at the 124th annual meeting of American Psychiatric Association, Washington DC, May 3-7, 1971

2. Frost JD Jr: A system for automatic analyzing sleep. Scientific exhibit at th 24th Clinical Convention of the Americ Medical Association, Boston, Nov 29-Dec 2, 1970; and at the 42nd annual scientific meeting of the Aerospace Me Association, Houston, Apr 26-29, 1971

3. Vogel GW: Data on file, Medical Department, Hoffmann-La Roche Inc. Nutley NJ

4. Dement WC: Data on file, Medical Department, Hoffmann-La Roche Inc. Nutley NJ



ROCHE

ROCHE LABORATORIES
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

SPECIAL ARTICLES

Regionalization: A New Approach to Emergency Health Care Delivery in Kentucky†

ROBERT S. LEVY, PH.D.*

ONLY by following a regional plan can a multitude of ambulance services and hospital emergency rooms be welded into a system that leads to the best in patient care. For such a system to be successful it should include centralized dispatching, billing, purchasing, training, evaluation and disaster control. Working closely with public officials, hospital administrators, physicians, nurses and other health workers, MEDICS (The Kentuckiana Emergency Medical Services Council) carefully developed a plan which has received wide public support and which will result in a highly organized ambulance-emergency room system serving nine counties, both urban and rural, with a population of more than 900,000 people.

Louisville developed a national reputation some years ago because of the speed at which its police departments whisked injured and sick patients to the area's hospital emergency rooms. Their instrument was the station wagon, rudimentarily equipped as an ambulance, with police officers well trained in first aid. For its time, it was a remarkable achievement. But, technology passed Louisville by. Besides, the Louisville police wanted out of the ambulance business. It was costly (at first there was no charge), and it kept patrolmen off their beats and away from what most of them considered to be "police work."

At the behest of then Mayor Frank Burke, a group of physicians and other health workers who were vitally interested in emergency health care delivery submitted a grant application to HEW to fund an Emergency Medical Services (EMS) demonstration project for the City of Louisville with Truman Mays, M.D., as Project Director. The application was turned down because it was not regional in nature. Picking up the cudgel was the Falls Region Health Council, the area's Comprehensive Health Planning Council. Frederic Veeder, representing the Council, and Donald Faigle, its Executive Director, organized a group of providers and consumers of emergency care to plan on a regional basis for a new way to deliver emergency health care. The group eventually incorporated itself as MEDICS (Medical Emergen-

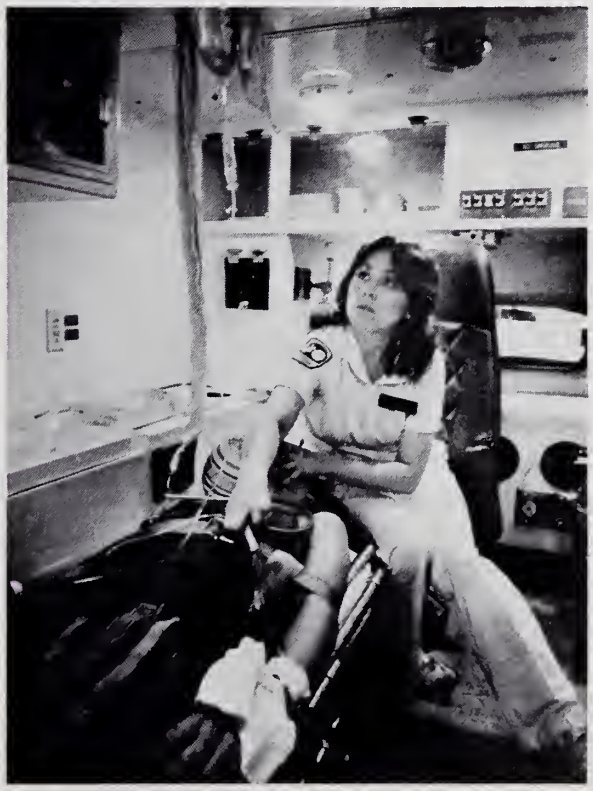


FIG. 1. Elaine McGraw, R.N., a nurse who staffs the Medicar, starts an IV on a patient in the ambulance before leaving for the hospital. (Photo by John Beckman—U of L Potential)

†*A contribution from the Department of Emergency Medicine, University of Louisville School of Medicine, Louisville*

**President Emeritus, MEDICS, Inc., and Professor of Biochemistry and Associate in Emergency Medicine, University of Louisville School of Medicine, Louisville*

cy District Inter County Services) to become the regional EMS Council for the seven counties in North Central Kentucky which make up the Falls Region: Bullitt, Henry, Jefferson, Oldham, Shelby, Spencer and Trimble, as well as ten counties in Southeast Indiana.

Early in its development MEDICS recruited all of the area's emergency room (ER) directors or their representatives to sit on a MEDICS Task Force on Facilities and Services. In addition, members of the region's medical societies, nursing associations and hospital councils, with interests in emergency care, played a large role on the MEDICS Board of Directors. As a consequence, MEDICS always has received cooperation from the people the community depends upon the most to deliver emergency care.

At its beginning MEDICS had little public but a lot of private support. It was a completely volunteer health group with numerous task forces. It received a real assist when the Falls Region Health Council submitted a planning grant application to the Ohio Valley Regional Medical Program (OVRMP) in order to fund MEDICS' activities. This application, after a great number of delays, was funded for one year and provided funds for an executive director, Patricia Cutchin (Woolfolk), and a small staff. This got MEDICS off the ground. It also strengthened the MEDICS project in Southeast Indiana because OVRMP insisted upon truly regional planning. This grant was later renewed and expanded in scope.

The success of the MEDICS program has been due to its ability to shift emphasis and direction. Starting first with pure planning, it submitted a regional EMS Plan to the State's Comprehensive Health Planning Council which was accepted as the region's official plan. Then, it began to organize services. By evaluating and categorizing area hospital emergency departments according to AMA standards, MEDICS developed a system of regionalized emergency rooms. One spin-off of this concern with upgrading ER delivery systems was the organization of a new Department of Emergency Medicine at the University of Louisville School of Medicine. Under the chairmanship of Donald Thomas, M.D., (who, along with Mildred Wade and the author, was a cofounder of MEDICS as well as its first president), this department treats 64,000 patients a year in Louisville General Hospital and will staff a regional trauma center for Western Kentucky in a new University Hospital now being planned.



FIG. 2. The modern modular ambulance (right) and a fully equipped Medicar (left). The Medicar, operated by a highly trained triage nurse for the Louisville EMS, is first on the scene to provide advanced life support. (Photo by John Beckman)

Louisville's latest mayor, Harvey Sloane, M.D., leaned heavily on the MEDICS group to prepare a position paper on EMS during his election campaign (all other candidates were given the same opportunity but did not avail themselves of it). After he was elected, he asked MEDICS to assist in the preparation of a grant application for federal matching funds, to organize a City EMS Board, and to recruit a Director for a new City Department of Emergency Medical Services. When the Board of Aldermen appropriated $500,000 for new ambulances and emergency technicians' (EMT's) salaries, a large part of the MEDICS program was under way. Robert Shaver, Ph.D., the City's new EMS Director, then acquired the Park Du Valle Ambulance Service in behalf of the City and, within six months, purchased new ambulances and trained enough EMT's to completely replace the police department as the City's principal ambulance operator.

Similar events have been occurring in Jefferson County where the County Police Department, still wanting to stay in the ambulance business, is now training officers as EMT's and is buying new ambulances under the supervision of Major Kenneth Graham. Oldham and Henry counties already have excellent volunteer rescue units. Shelby County operates its own governmental service. Bullitt County makes use of a private entrepreneur. Spencer County is organizing a new volunteer unit, while Trimble County is still in the decision-making process. By early 1976, the region will be operating 29 new ambulances all staffed by EMT's. Also available to the region are the ambulance helicopters operated by the Army's 431st Medical Detachment at Fort Knox, coordinated by John VonderHaar of the MAST (Medical Assistance to Safety and Traffic) program. These units are on call 24 hours a

day with trained technicians to transport patients anywhere within a 100-mile radius of Fort Knox.

The tool for forging together this multitude of services under a regional umbrella will be a Consortium, operating under the aegis of KIPDA, the Kentuckiana Regional Planning and Development Agency. This Consortium, with its own region-wide Advisory Board, applied for and has received $1.2 million in federal, state and local matching funds to purchase 29 ambulances and provide salaries for 87 technicians. It has employed Hayden Ballard as its permanent coordinator to establish centralized dispatching, billing, purchasing, training and evaluation for the region's ambulance services (including those in Floyd and Clark counties, Indiana), all operated independently by municipal governments or private entrepreneurs. Thus, as it was charged by OVRMP, MEDICS has fashioned a truly regional system for the delivery of emergency health care to more than 900,000 people.

The advantages of such a system to the injured patient are obvious. No longer will he be rushed to the hospital, endangering life and limb for the second time. Technicians will be trained to stabilize the patient at the scene, using the ambulance as a mobile emergency room with two-way radio communication directly with ER physicians and nurses. As technicians move into the advanced training cycle to become EMT's II, their expertise will increase enormously, their armamentarium to include defibrillation and other critical life-saving techniques. Not so obvious are other advantages to the community. A well-organized regional system, centrally dispatched by radio, reduces the number of unnecessary ambulance runs and thus reduces the cost. Centralized control can also be of real value in times of disaster, since the whereabouts of each vehicle is known, and the system is then flexible enough to cope with every situation. Not only can hundreds of lives be saved, but early, competent treatment also can reduce maiming and permanent injury. If the program is fully successful, then EMS should become just another public service, as acceptable to the community as police and fire.



FIG. 3. A nurse and technician at work at a serious accident of a pedestrian and a train. (Photo by John Beckman)

Acknowledgements

The first two years' operation of MEDICS, Inc., was supported by a grant from the Ohio Valley Regional Medical Program. During this period the MEDICS staff consisted of Patricia Cutchin (Woolfolk), Executive Director; Jean Meyers, EMS Planner; and Janet Reinhardt and Teresa Glotzbach, secretaries.

Agnes Livingood (Urban Studies Center), an EMS Consultant, was the Consortium's first Acting Coordinator.

MEDICS, Inc., also is indebted to Roland Dallaire (State of Kentucky Center for Comprehensive Health Systems Development), Bruce Smith, Ralph Gilmer and Grant Bruton (Falls Region Health Council), and Joseph Masiokas (South East Indiana Comprehensive Health Planning Council) for their continued interest in and support of its programs.

The author also wishes to acknowledge the dedicated work of many enthusiastic volunteers, especially Miles Mumford, Franklin Yudkin, William Green, M.D., John VonderHaar, Rondall Thornton and Jean Grimsley (who made up the MEDICS Executive Committee), as well as James Bacon, M.D., Priscilla Chandler, Lee Duvall, John Harper, Agnes Livingood, Truman Mays, M.D., Kathryn Mershon, George Mullineaux, Mary Smith, M.D., Donald Thomas, M.D., Betty Vicroy, Mildred Wade, Lee Waller, Cheryl Westbay and Jo Wilson.

The author is forever grateful to Richard Turrell, M.D., Collin MacCarty, M.D., and Leslie Van Nostrand, M.D., whose support and encouragement made possible his participation in the MEDICS program.



Testing in Humans: Who, Where & When.

the weight of ethical opinion:

Few would disagree that the effectiveness and safety of any therapeutic agent or device must be determined through clinical research.

But now the *practice* of clinical research is under appraisal by Congress, the press and the general public. Who shall administer it? On whom are the products to be tested? Under what circumstances? And how shall results be evaluated and utilized?

The Pharmaceutical Manufacturers Association represents firms that are significantly engaged in the discovery and development of new medicines, medical devices and diagnostic products. Clinical research is essential to their efforts. Consequently, PMA formulated positions which it submitted on July 11, 1975, to the Subcommittee on Health of the Senate Labor and Public Welfare Committee, as its official policy recommendations. Here are the essentials of PMA's current thinking in this vital area.

1. PMA supports the mandate and mission of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research and offers to establish a special committee composed of experts of appropriate disciplines familiar with the industry's research methodology to volunteer its service to the Commission.

2. PMA supports the formation of an independent, expert, broadly based and representative panel to assess the current state of drug innovation and the impact upon it of existing laws, regulations and procedures.

3. When FDA proposes regulations, it should prepare and publish in the *Federal Register* a detailed statement assessing the impact of those regulations on drug and device innovation.

4. PMA proposes that an appropriately qualified medical organization be encouraged to undertake a comprehensive study of the optimum roles and responsibilities of the sponsor and physician when company-sponsored clinical research is performed by independent clinical investigators.

5. PMA recognizes that the physician-investigator has, and should have, the ultimate responsibility for deciding the substance and form of the informed consent to be obtained. However, PMA recommends that the sponsor of the experiment aid the investigator in discharging this important responsibility by providing (1) a document detailing the investigator's responsibilities under FDA regulations with regard to patient consent, and (2) a written description of the relevant facts about the investigational item to be studied, in comprehensible lay language.

6. In the case of children, the sponsor must require that informed consent be obtained from a legally appropriate representative of the participant. Voluntary consent of an older child, who may be capable of understanding, in addition to that of a parent, guardian or other legally responsible person, is advisable. Safety of the drug or device shall have been assessed in adult populations prior to use in children.

7. PMA endorses the general principle that, in the case of the mentally infirm, consent should be sought from both an understanding subject and from a parent or guardian, or in their absence, another legally responsible person.

8. Pharmaceutical manufacturers sponsoring investigations in prisons must take all reasonable care to assure that the facilities and personnel used in the conduct of the investigations are suitable for the protection of participants, and for the avoidance of coercion, with a respect for basic humanitarian principles.

9. Sponsors intending to conduct non-therapeutic clinical trials through the participation of employee volunteers should expand the membership and scope of its existing Medical Research Committee, or establish such an internal Medical Research Committee, with responsibility to approve the consent forms of all volunteers, designs, protocols and the scope of the trial. The Committee should also bear responsibility to ensure full compliance with all procedures intended to protect employee volunteers' rights.

10. Where the sponsor obtains medical information or data on individuals, it shall be accorded the same confidential status as provided in codes of ethics governing health care professionals.

11. PMA and its member firms accept responsibility to aid and encourage appropriate follow-up of human subjects who have received investigational products that cause latent toxicity in animals or, during their use in clinical investigation, are found to cause unexpected and serious adverse effects.

12. PMA supports the exploration and development by its member companies of more systematic surveillance procedures for newly marketed products.

13. When a pharmaceutical manufacturer concludes, on the basis of early clinical trials of a basic new agent, that a new drug application is likely to be submitted, a proposed development plan accompanied by a summary of existing data, would be submitted to the FDA. Following a review of this submission, the FDA, and its Advisory Committee where appropriate, would meet with the sponsor to discuss the development plan. No *formal* FDA approval should be required at this stage. Rather, the emphasis should be on identification of potential problems and questions for the sponsor's further study and resolution as the program develops.

The PMA believes that health professionals as well as the public at large should be made aware of these 13 points in its Policy on Clinical Research. For these recommendations envisage constructive, cooperative action by industry, research institutions, the health professions and government to encourage creative and workable responses to issues involved in the clinical investigation of new products.

P·M·A
Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W.
Washington, D. C. 20005



MATERNAL MORTALITY



Case 3-74. This 18-year-old, single, black, Gravida 1, Para O, was under the care of a physician. Expected date of delivery was June 22nd. Prenatal course was apparently uncomplicated. She entered labor with regular contractions that began around 4 a.m. the first of June. She was admitted to a 374-bed hospital at 11:30 p.m. having contractions every three to five minutes, temperature 98, pulse, 110, and blood pressure 110/80. The patient's hemoglobin was 10.6; hematocrit 32%, WBC, 10,400; with segs 78; lymphs 18, and monos 4. Urinalysis revealed a large amount of acetone, otherwise, normal. Vaginal examination revealed the cervix 5-6 cm dilated, cephalic presentation, membranes intact and bulging. Membranes were ruptured artificially at 11:45 p.m. The fluid was clear. Fetal heart was good in the left-lower quadrant. She was sedated with 50 mg Meperidine Hydrochloride intravenously at 12 p.m. She was completely dilated, O station at 12:20; had a saddle block at 1:20, using 6 mg of Tetracaine Hydrochloride and 60 mg of Dextrose given at L 3-4 with a 25 gauge needle. It was atraumatic and was a satisfactory block. She delivered a 5 lb 14 oz girl from the ROA position with right mediolateral episiotomy and low forceps at 1:35. The baby had an Apgar of 9 at one minute and 10 at five minutes. Her postpartum course was uncomplicated. She was afebrile. She had no other problems and was discharged on the 4th of June.

She was seen in the emergency room of the same hospital on the 11th of June complaining of dizziness, vomiting, a lack of appetite, and staying cold. She stated that she got sick two days before. Her temperature on admission to the emergency room was 101 orally, pulse 102, respiration 24, and blood pressure 126/50. Blood count on the 12th revealed a hemoglobin of 10.3; hematocrit of 32%, WBC 6,000, 56 segs, 1 band, 31 lymphs, 10 monos, and 2 basophils. Examination by her physician revealed her to be somewhat lethargic and complaining of headache and chilling. Her ENT revealed no injection or exudate. Her lungs were clear. The heart rate and rhythm were sinus, no murmurs, did not seem to be enlarged clinically. The uterus was still enlarged three fingerbreadths below the umbilicus, moderately tender. There was some dark lochia, some foul-smelling discharge noted. The uterus did not feel particularly tender, although there was some slight suprapubic tenderness. The impression was endometritis, postpartum.

She was started on intravenous fluids, Promethazine Hydrochloride for nausea, Ampicillin Sodium 500 mg. Q.I.D. The temperature was 102 on the 12th. She was given aspirin for temperature elevation. She didn't ambulate very much, complained of the food. On the 17th she was still febrile. Ampicillin Trihydrate was discontinued, and she was switched to Oxytetracycline 250 mg. Q.I.D. and blood cultures were obtained, when her temperature spiked to 103. On the 19th her temperature was 101.2. She had no further headaches, stiff neck, and when asked to move so she could be examined by her physician, she again became somewhat hostile and refused to allow him to examine her. The dietician talked with the patient and her mother. An internist was called to see her on the 19th. He felt the infection must have been viral in origin since her WBC remained low. On the 16th, the hemoglobin was 11.6 grams, hematocrit 37, WBC 4,000, 53 segs, 42 lymphs, 4 monos, and 1 eosinophil. The 19th her hemoglobin was 10.7 grams, hematocrit of 33%, WBC 5,900, 3 bands, 44 lymphs, 42 segs, and 11 monos. Protein Bound Iodine was 5.2, on the 19th, with T-3 being a little low, 23.5 (normal 25-35), T-4 was all right, 7, with normal range being 5-13.

Catheterized urine on the 21st revealed 1-12 WBCs, 4+ bacteria with budding yeast. Culture and sensitivity of urine revealed no growth after 48 hours incubation. All the febrile agglutination studies were negative which were done on the 22nd. Hemoglobin on the 24th was 9.3 with hematocrit of 28, WBC 8,600, 80 segs, 20 lymphs. Glucose was done the 25th, was 155. Chest X-ray on the 20th was suggestive of minimal bronchial pneumonia.

Symptomatically, the patient was improved, but she still had an elevated temperature of 102°. The 21st her temperature was 100. She was confused and refused her Bennett therapy. She had such a poor intake on the 24th that she was given some intravenous fluids. Her weight on admission was 117 lbs.

The neurologist saw her on the 25th. On examination the patient had a stiff neck, and some left facial paralysis, probably the seventh nerve, peripheral type, and eyeball paralysis, 3, 4, and 5. The lumbar puncture was performed with xanthochromic fluid. The impression was a picture of a primary fossular type meningitis, a question of tuberculosis. At approximately 3:45 p.m. a lumbar puncture was performed. At 4:30 the patient was found in congestion and was having periods of apnea. She was suctioned with no results. The patient apparently aspirated. She ceased to breathe at 5 p.m. An emergency page was called. The neurologist and her obstetrician were notified. She expired at 5:35 p.m.

The impression was of viral meningitis, postpartum.

Comment

The Committee classified this as an indirect obstetrical death. It is realized that adequate information is not presented in order to make a proper diagnosis. However, it is felt worthy of publication since several similar

(Continued on Page 206)

ORGANIZATION SECTION

Emergency Health Care Seminar Set for June 2-3

The Sixth Annual Emergency Health Care Seminar is scheduled for June 2-3 at the Executive West in Louisville. Program features include lectures, demonstrations, workshops and special interest meetings.

"Orthopaedics" will be the theme of the opening session on June 2. Marshall B. Segal, M.D., from the University of Chicago Hospital and Clinics, will speak on the medicolegal aspects of emergency care at the luncheon on that same day. Three afternoon workshops will deal with Basic Life Support, Advanced Life Support and Basic Splints and Traction. Certification by the American National Red Cross is possible through completion of the Basic Life Support course which is limited to the first 75 registrants.

The Thursday, June 3 session, will deal with numerous aspects of emergency treatment. Four special interest groups will hold simultaneous programs on Thursday afternoon. The luncheon speaker will be Charles E. Lucas, M.D., of Wayne State University, Detroit, who will talk about multiple injuries.

Continuing education credit has been applied for from the American Medical Association, American Academy of Family Physicians, American Academy of Emergency Physicians, Kentucky Dental Association, Emergency Department Nurses Association, Kentucky Nurses Association, Kentucky State Association of Licensed Practical Nurses, Inc. and National Registry of EMT's.

For more information on registration, contact the KMA Headquarters Office.

"Cancer in Women" Meeting Set for May 20-22

The Fifth Biennial Symposium, "Cancer in Women," will be held May 20-22 at the Galt House in Louisville. The symposium will be presented by the Kentucky Obstetrical and Gynecological Society and supported by the Kentucky Division, American Cancer Society.

Guest speakers for the program include Malcolm Coppleson, M.D., Sidney, Australia; Henry Clay Frick, II, M.D., New York; Philip J. Krupp, M.D., New Orleans, and George C. Lewis, M.D., Philadelphia.

Credit hours have been requested from the University of Louisville Continuing Education Program. There will be no registration fee. For additional information contact: Sandra Kubarych, R.N., University of Louisville School of Medicine, Department of Obstetrics and Gynecology, Louisville General Hospital, 323 East Chestnut Street, Louisville 40202.

NEWS ITEMS

Marie M. Keeling, M.D., Louisville, staff pathologist at Veterans Administration Hospital, was recently honored by the Louisville YWCA for her outstanding achievement in medicine.

Ralph Shabetai, M.D., Lexington, has been named to the Board of Governors of the American College of Cardiology. Doctor Shabetai, Professor of Medicine at the University of Kentucky College of Medicine, will be responsible for the activities for the College for Kentucky.

Alvin C. Poweleit, M.D., Covington, has recently published a book entitled "USAFFE". The book covers his experiences in the Philippines during World War II and deals with atrocities perpetrated by the Japanese during the Fall of the Philippines.

Dr. Jones Dies at Age of 93, Was '67 Award Recipient

William Harrison Jones, M.D., Gray, Kentucky, died on February 23 at the age of 93. Doctor Jones was the 1967 recipient of the KMA Outstanding General Practitioner Award and at that time had practiced medicine for over 60 years in Gray.

A 1909 graduate of the University of Louisville School of Medicine, Doctor Jones was the father of State Treasurer Frances Jones Mills. A past president of the Corbin Medical Society, Doctor Gray maintained active membership in the Kentucky Medical Association until his death and was an emeritus member of the American Medical Association.

Former Official of KHA, Hasty Riddle, Dies

Hasty W. Riddle, former Executive Vice President of the Kentucky Hospital Association from 1960 until October, 1975, died on March 16 after a lengthy illness.

He was the 1974 recipient of the Kentucky Medical Association Award given for his accomplishments as a layman in the field of health care. Involved in the development of Comprehensive Health Planning in Kentucky, he also served on the Kentucky Physicians' Mutual Board of Directors and was instrumental in the passage of the Kentucky Certificate of Need legislation.

ROLL CALL

House of Delegates—Special Session

February 26, 1976

1974-75 OFFICERS

Speaker	Carl Cooper, Jr.	Present
Vice-Speaker	Richard B. McElvein	.....
President	Hoyt D. Gardner	Present
President-Elect	David A. Hull	Present
Vice-President	Laszlo Makk	Present
Secretary	S. Randolph Scheen	.....
Treasurer	Keith P. Smith	.....
Delegate to AMA	J. Thomas Giannini	Present
Delegate to AMA	Fred C. Rainey	Present
Delegate to AMA	David B. Stevens	.....
Alternate Delegate to the AMA	Charles G. Bryant	Present
Alternate Delegate to the AMA	William W. Hall	.....
Alternate Delegate to the AMA	Thomas L. Heavern, Jr.	Present
Parliamentarian	Bennett L. Crowder, II	Present

1974-75 TRUSTEES

District		
First	W. Eugene Sloan	Present
Second	Charles C. Kissinger	Present
Third	Frank R. Pitzer	Present
Fourth	Charles B. Spalding	Present
Fifth	Edward N. Maxwell	.....
Sixth	Paul J. Parks	Present
Seventh	John P. Stewart	.....
Eighth	Richard J. Menke	Present
Ninth	James L. Ferrell	Present
Tenth	James B. Holloway, Jr.	Present
Eleventh	R. Eugene Bowling	.....
Twelfth	William T. Watkins	Present
Thirteenth	J. Wesley Johnson	Present
Fourteenth	Jerry D. Fraim	Present
Fifteenth	Harold L. Bushey	Present

1974-75 ALTERNATE TRUSTEES

District		
First	Keith E. Ellis	.....
Second	Kenneth M. Eblen	.....
Third	Henry R. Bell	.....
Fourth	Terrell D. Mays	Present
Fifth	Lloyd G. Yopp	.....
Sixth	Carlisle V. Dodson	.....
Seventh	William H. Keller	Present
Eighth	Robert C. Smith	Present
Ninth	Don R. Stephens	Present
Tenth	Richard F. Hench	Present
Eleventh	Joseph M. Bush	.....
Twelfth	John M. Baird	Present
Thirteenth	Arthur B. Richards	Present
Fourteenth	Harvey A. Page	.....
Fifteenth	Walter H. Stepchuck	.....

PAST PRESIDENTS

Past President	Fred C. Rainey	Present
Past President	Lee C. Hess	Present
Past President	John S. Harter	Present
Past President	John C. Quertermous	.....
Past President	Walter L. Cawood	.....

1974-75 DELEGATES

First District

BALLARD		
CALLOWAY		
CARLISLE		
FULTON		
GRAVES		
HICKMAN	C. J. Mills	.....
LIVINGSTON	Stephen Burkhart	.....
McCRACKEN	Charles H. Bohle	.....
	Jim Embry	Present
	Wally Montgomery	Present
MARSHALL	Keith Ellis	.....

Second District

DAVIESS	James H. Callis	Present
	William E. Pearson	Present
	Glen Richards	Present
HANCOCK	B. Presley Smith, II	.....
HENDERSON	Kenneth Eblen	Present
	Wayne C. Liles	Present
McLEAN	W. C. Edds	Present
OHIO	Robert E. Norsworthy	Present
UNION	Wallas N. Bell	.....
WEBSTER		

Third District

CRITTENDEN	Wes Creager	.....
HOPKINS	Wallace R. Alexander	.....
	James Gulley	Present
PENNYRILE MULTI-COUNTY SOCIETY		
CALDWELL	Nathaniel H. Talley	Present
CHRISTIAN	Carl B. Caplinger	.....
	Delmas Clardy	Present
	David Crowder	.....
LYON	Steve Hiland	Present
MUHLENBERG	Joe Boggess	Present
TODD	Larry Brock	Present
TRIGG	John W. Collins	Present

Fourth District

BRECKINRIDGE	Robert B. Chambliss	.....
BULLITT	J. W. Roney	.....
GRAYSON	Ralph Thomas	Present
GREEN	H. B. Huntsman	Present
HARDIN	Thomas Ferriell, Jr.	Present
	Terrell D. Mays	Present
HART	Clem Nichols	.....
LARUE		
MARION	N. D. Widmer	.....
MEADE		
NELSON	Emmett Wood	Present
TAYLOR	Henry F. Chambers	Present
WASHINGTON		

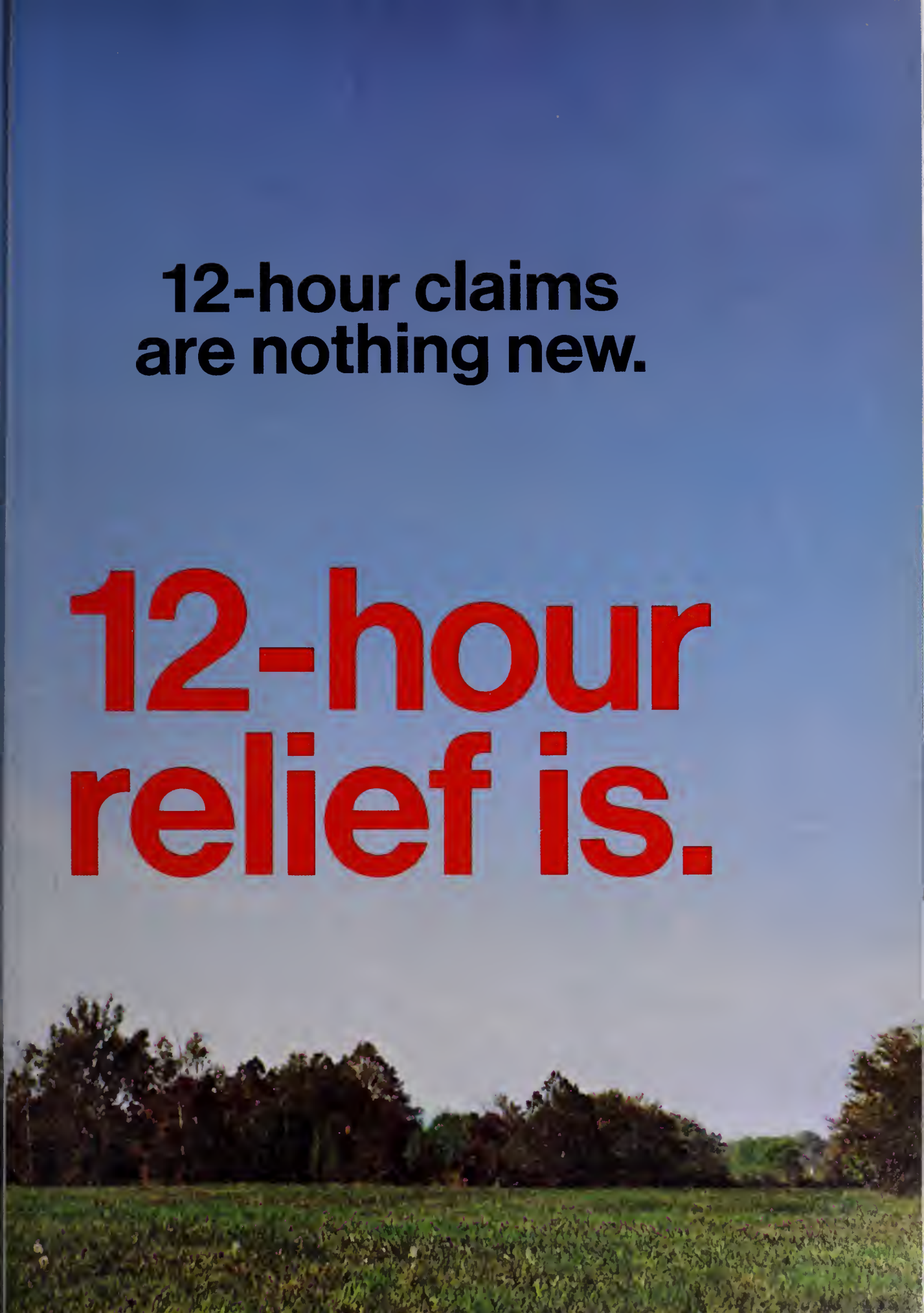
Fifth District

JEFFERSON	Robert E. Arnold	.....
	David H. Bizot	.....
	McHenry S. Brewer	.....
	Charles G. Bryant (Alt.)	Present
	Peter C. Campbell	Present
	E. Dean Canan	Present
	W. Neville Caudill	Present
	Samuel H. Cheng	.....
	Alvin M. Churney	.....
	C. C. Cook (Alt.)	Present
	James W. Curry	.....
	Charles E. Dobbs	Present
	Rudy J. Ellis	.....
	Michael Flynn	.....
	Darius Ghazi	Present
	Laman A. Gray, Jr.	.....
	Cecil L. Grumbles (Alt.)	Present
	Harold D. Haller, Sr.	Present
	John S. Harter (Alt.)	Present
	R. Brooks Howard	.....
	Robert G. Howard (Alt.)	Present
	Lawrence F. Jelsma	.....
	Richard Jelsma	.....
	Joseph C. Marshall	.....
	T. M. Marshall (Alt.)	Present
	James P. Moss	Present
	Robert L. McClendon	Present
	George Nichols, II	Present
	William J. Oliver	.....
	B. Frank Radmacher	.....
	Bernard Rand	Present
	Anne C. D. Richman	Present
	R. Parnell Rollings	Present
	W. Fielding Rubel	.....
	Robert P. Schiavone (Alt.)	Present
	Robert M. Senese	.....
	Charles B. Severs	Present

(Continued on Page 205)

12-hour claims
are nothing new.

12-hour relief is.



NEW

Novafed® A Capsules

Each capsule contains pseudo-ephedrine hydrochloride 120 mg. and chlorpheniramine maleate 8 mg.

Controlled-Release Decongestant Plus Antihistam

It goes the distance.





Clinical studies confirm full 12-hour effectiveness.

For years, patients have heard of drugs providing long-lasting relief. But after six or eight hours, they often run out of relief. And it's too soon to take the next dose.

Now, with Novafed A, Dow introduces a prescription capsule with 12-hour effectiveness in relieving allergy and hay fever symptoms. Placebo-controlled clinical studies show that the high level of decongestant in Novafed A provides relief for as long as 12 hours. At the same time, its antihistamine relieves the patient's itchy eyes and runny nose *without* the excessive dryness of anticholinergic agents.

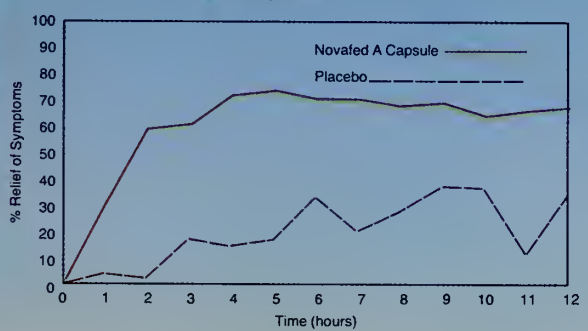
Prompt onset of effect is followed by full 12-hour relief.

(Please refer to the following page for bioavailability studies and prescribing information.)



Patients with severe pollen allergies were tested during hay fever season in a countryside environment and asked to rate severity of five different symptoms on a scale of 1 to 4.

Clinical Study: Degree of Relief from Itchy Eyes and Nose and Throat, Watery Eyes, Runny Nose*



*Unpublished data, Medical Department Files, Dow Pharmaceuticals, The Dow Chemical Company, Indianapolis, Indiana.

DOW

Specialists in Cough and Cold Care





NEW

Novafed A Capsules

Each capsule contains pseudoephedrine hydrochloride 120 mg. and chlorpheniramine maleate 8

Controlled-Release Decongestant Plus Antihistamine

It goes the distance.



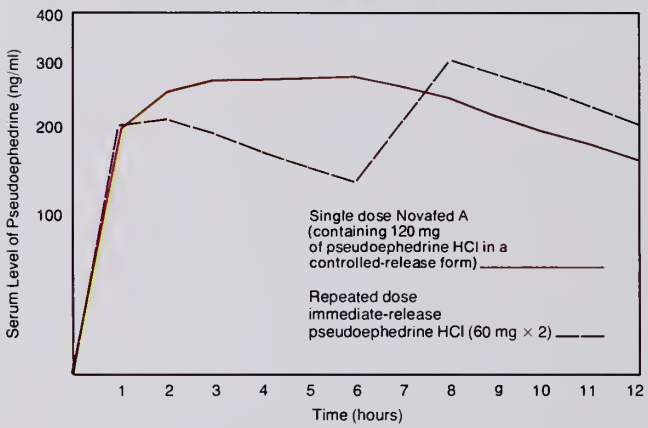
Prompt onset and sustained serum levels over 12 hour

A bioavailability study confirmed that the sustained 12-hour action of Novafed A was comparable to that of immediate-release medication taken at 6-hour intervals.

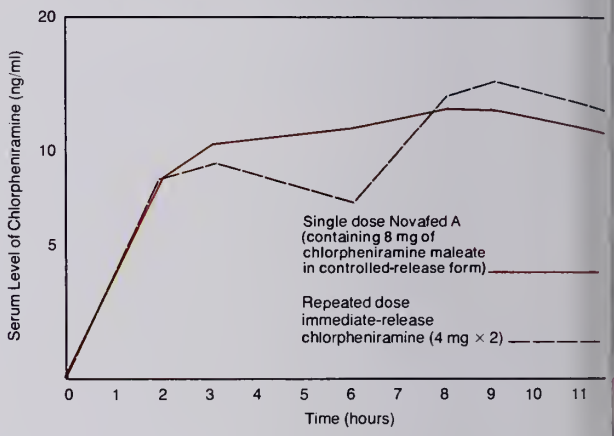
The chart at the left shows the serum levels of pseudoephedrine. Initial serum levels following one Novafed A Capsule were comparable to those following a single dose of 60 mg. pseudoephedrine hydrochloride in an immediate-release form. Serum levels of pseudoephedrine over a 12-hour period following a single dose of Novafed A were also comparable to those obtained by an immediate-release form taken every 6 hours.

The chart at the right shows the serum levels of chlorpheniramine. Initial serum levels following one Novafed A Capsule were comparable to those followi a single dose of 4 mg. chlorpheniramine maleate in an immediate-release form. Serum levels of chlorpheniramine over a 12-hour period following a single dose of Novafed A were also comparable to those obtained by an immediate-release form taken every 6 hours.

Comparison of Mean Serum Levels of Pseudoephedrine Following Novafed A and an Immediate-Release Reference Formulation*



Comparison of Mean Serum Levels of Chlorpheniramine Followir Novafed A and an Immediate-Release Reference Formulation*



*Unpublished data, Medical Department Files, Dow Pharmaceuticals, The Dow Chemical Company, Indianapolis, Indiana.

DESCRIPTION: Each NOVAFED A capsule contains 120 mg. of pseudoephedrine hydrochloride and 8 mg. of chlorpheniramine maleate. The specially formulated pellets in each capsule are designed to provide continuous therapeutic effect for about 12 hours. Nearly one-half of the active ingredients is released soon after administration and the remainder is released slowly over the remaining time period.

ACTIONS: NOVAFED A combines the action of a nasal decongestant, pseudoephedrine hydrochloride, and an antihistamine, chlorpheniramine maleate. These ingredients are combined to provide prompt and sustained nasal and upper respiratory decongestant and antihistaminic action.

INDICATIONS: NOVAFED A is indicated for the relief of nasal congestion and eustachian tube congestion associated with the common cold, sinusitis and acute upper respiratory infections. It is also indicated for perennial and seasonal allergic rhinitis, vasomotor rhinitis, allergic conjunctivitis due to inhalant allergens and foods and for mild, uncomplicated allergic skin manifestations of urticaria and angioedema. Decongestants in combination with antihistamines have been used for many years to relieve eustachian tube congestion associated with acute eustachian salpingitis, aerotitis media, acute otitis media and serous otitis media. NOVAFED A may be given concurrently, when indicated, with analgesics and antibiotics.

CONTRAINDICATIONS: Symphathomimetic amines are contraindicated in patients with severe hypertension, severe coronary artery disease, and in patients on MAO inhibitor therapy. Antihistamines are contraindicated in patients with narrow-angle glaucoma, urinary retention, peptic ulcer, during an asthmatic attack, and in patients receiving MAO inhibitors.

Children under 12: NOVAFED A controlled-release capsules should not be used in children less than 12 years of age.

Nursing Mothers: Pseudoephedrine is contraindicated in nursing mothers because of the higher than usual risk for infants from sympathomimetic amines.

Hypersensitivity: This drug is contraindicated in patients with hypersensitivity or idiosyncrasy to sympathomimetic amines or antihistamines. Patient idiosyncrasy to adrenergic agents may be manifested by insomnia, dizziness, weakness, tremor or arrhythmias.

WARNINGS: Sympathomimetic amines should be used judiciously and sparingly in patients with hypertension, diabetes mellitus, ischemic heart disease, increased intraocular pressure, hyperthyroidism, or prostatic hypertrophy. Sympathomimetics may produce central nervous system stimulation and convulsions or cardiovascular collapse with accompanying hypotension.

Antihistamines may impair mental and physical abilities required for the performance of potentially hazardous tasks, such as driving a vehicle or operating machinery, and mental alertness in children. Chlorpheniramine maleate has an atropine-like action and should be used with caution in patients with increased intraocular pressure, hyperthyroidism, cardiovascular disease, hypertension or in patients with a history of bronchial asthma.

Oo not exceed recommended dosage.

Use in Pregnancy: The safety of pseudoephedrine for use during pregnancy has not been established.

Use In Elderly: The elderly (60 years and older) are more likely to have adverse reaction to sympathomimetics. Overdosage of sympathomimetics in this age group may cause hallucinations, convulsions, CNS depression, and death. Therefore, safe use of a short-acting sympathomimetic should be demonstrated in the individual elderly patient before considering the use of a sustained-action formulation.

PRECAUTIONS: This drug should be used with caution in patients with diabetes, hypertension, cardiovascular disease and hyperreactivity to ephedrine. The antihistaminic may cause drowsiness and ambulatory patients who operate machinery or motor vehicles should be cautioned accordingly.

ADVERSE REACTIONS: Hyperreactive individuals may d play ephedrine-like reactions such as tachycardia, palp tions, headache, dizziness, or nausea. Patients sensitiv to antihistamines may experience mild sedation.

Sympathomimetic drugs have been associated with cert untoward reactions including fear, anxiety, tenseness, restlessness, tremor, weakness, pallor, respiratory diffi culty, dysuria, insomnia, hallucinations, convulsions, depression, arrhythmias, and cardiovascular collapse w hypotension.

Possible side effects of antihistamines are drowsiness, restlessness, dizziness, weakness, dry mouth, anorexia nausea, headache and nervousness, blurring of vision, heartburn, dysuria and very rarely, dermatitis.

DRUG INTERACTIONS: MAO inhibitors and beta adrener blockers increase the effect of sympathomimetics. Sym pathomimetics may reduce the antihypertensive effects methyldopa, mecamylamine, reserpine and veratrum alkaloids. Concomitant use of antihistamines with alco tricyclic antidepressants, barbiturates and other centra nervous system depressants may have an additive effect

DOSAGE AND ADMINISTRATION: One capsule every 12 hours. Do not give to children under 12 years of age.

CAUTION: Federal law prohibits dispensing without prescription.

HOW SUPPLIED: NOVAFED A is supplied in red and or colored hard gelatin capsules, monogrammed with the Dow diamond followed by the number 109, in bottles of 100.

DOW

DOW PHARMACEUTICA
The Dow Chemical Compan
Indianapolis, IN 46268

Specialists in cough and cold care

	Charles C. Smith (Alt.)	Present
	Samuel A. Smith	Present
	David L. Stewart	Present
	Thomas Stigall	Present
	T. Bodley Stites	Present
	Gerald D. Temes	.....
	Walter L. Thompson	Present
	Robert Tillett (Alt.)	Present
	David Townes	Present
	Walter L. Wilson	Present
	Marvin A. Yussman	Present
	Walter Zukof (Alt.)	Present

Sixth District

ADAIR	M. C. Loy	.....
ALLEN	Earl P. Oliver	.....
BARREN	Paul S. York	Present
BUTLER		
CUMBERLAND	Joseph Schickel	.....
EDMONSON	Sidney E. Farmer	.....
LOGAN	C. V. Dodson	Present
METCALFE	L. P. Emberton	.....
MONROE	Kenneth R. Crabtree	.....
SIMPSON	J. Michael Pulliam	.....
WARREN	Keith Coverdale	Present
	Nelson B. Rue	Present
	Gerald E. Sullivan	Present

Seventh District

ANDERSON	H. Boyd Caudill	.....
CARROLL	Cecil Martin	Present
FRANKLIN	B. B. Baughman	Present
	William H. Keller	Present
GALLATIN	John D. Fielding	.....
GRANT	Roscoe M. Goodman	.....
HENRY	Wyatt Norvell	Present
OLDHAM	Harold Funke	Present
OWEN	O. A. Cull	.....
SHELBY	William Powers	Present
SPENCER	William K. Skaggs	.....
TRIMBLE	Carl Cooper, Jr.	Present

Eighth District

BOONE	Herbert Booth	.....
CAMPBELL-KENTON	Charles D. Eversole	Present
	Howard Herringer, Jr.	Present
	Robert K. Johnson	Present
	William Monnig	Present
	Robert E. Smith	Present
	Fred A. Stine	Present

Ninth District

BATH	Robert A. Byron	.....
BOURBON	Harry L. Galloway	Present
BRACKEN	J. M. Stevenson	.....
FLEMING	R. W. Fidler	.....
HARRISON	Don R. Stephens	Present
MASON		
NICHOLAS	Allen J. Hamon	.....
PENDLETON	Robert L. McKenney	.....
ROBERTSON		
SCOTT	Gus A. Bynum	Present

Tenth District

FAYETTE	H. L. Bailey (Alt.)	Present
	M. Cary Blaydes	.....
	Leslie W. Blakey	Present
	Peter P. Bosomworth	Present
	Walter R. Brewer	Present
	Thomson R. Bryant, Jr.	.....
	P. Raphael Caffrey	Present
	D. Kay Clawson (Alt.)	Present
	Colby N. Cowherd	.....
	Melvin L. Dean	Present
	Glenn U. Dorroh	Present
	John Floyd (Alt.)	Present
	Richard D. Floyd	.....
	Ward O. Griffin	Present
	Allen E. Grimes, Jr.	Present
	Walter Harris (Alt.)	Present
	C. Nicholas Kavanaugh	Present
	Carl H. Scott	Present
	John M. Stoeckinger	Present
	John E. Trevey	Present
	W. E. Waltrip (Alt.)	Present
JESSAMINE	J. Sankey Williams	Present
WOODFORD	Alex J. Alexander	.....

Eleventh District

CLARK	Robert Davis	Present
ESTILL		
JACKSON	Donald L. Peterson	.....
LEE	Arnold L. Taulbee	.....
MADISON	Don E. Cloys	Present
	Linda S. Fagan	.....
MENIFEE		
MONTGOMERY		
OWSLEY	Mildred B. Gabbard	Present
POWELL	Samuel E. Cecil	.....
WOLFE	Paul F. Maddox	.....

Twelfth District

BOYLE	John M. Baird	Present
CASEY	Lewis E. Wesley	Present
CLINTON	Floyd B. Hay	Present
GARRARD	Paul S. Sides	Present
LINCOLN	Charles C. Crase	Present
McCREARY	John Patton	.....
MERCER	James M. Keightley	.....
PULASKI	J. Roy Biggs	Present
	Danny Clark	Present
ROCKCASTLE	George W. Griffith	.....
RUSSELL	Charles E. Peck	.....
WAYNE	Frank Duncan	Present

Thirteenth District

BOYD	Larry B. Craycraft	.....
	Wiley Kozee	Present
	J. E. Moore	Present
CARTER		
ELLIOTT	Brown L. Adkins	.....
GREENUP	Manuel S. Garcia	Present
LAWRENCE		
LEWIS		
MORGAN	M. L. Peyton	.....
ROWAN	R. Thomas Fossett	Present

Fourteenth District

BREATHITT	Emanuel C. Turner	.....
FLOYD	W. Grady Stumbo	Present
JOHNSON	Joseph H. Rapier, Jr.	Present
KNOTT	Gene T. Watts	.....
LETCHER	James B. Tolliver	.....
MAGOFFIN		
MARTIN	Raymond D. Wells	.....
PERRY	Keith Cameron	.....
PIKE	Harvey Page	.....
	Oscar W. Thompson	Present

Fifteenth District

BELL	Francis A. Forde	Present
	Emanuel Rader	Present
CLAY	William E. Becknell	Present
HARLAN	Phillip J. Begley	Present
	Orides Bonadio	Present
KNOX	Rufino Crisostomo	Present
LAUREL	Robert E. Pennington	Present
LESLIE		
WHITNEY	R. D. Pitman	Present

The information in the Roll Call was taken from the attendance record cards signed by the delegates prior to the special called meeting of the House, February 26, 1976.

Maternal Mortality
(Continued from Page 198)

cases have come to the attention of the Committee that have not resulted in maternal death but found to be cases of viral or bacterial meningitis. It is also possible that this patient could have had a central nervous system tumor that did not become evident until this event. Although there was a period of time between the spinal tap performed at delivery and her readmission to the hospital, it is possible that she could have been suffering from a tuberculous meningitis, which was exacerbated. It is possible that her symptoms and signs prior to death could have indicated a systemic infection that affected the central nervous system.

mountain valley golf







Golf's no uphill climb at Sapphire Valley, in the cool North Carolina mountains ... our championship course rolls gently through a vast, quiet valley. All that makes a complete family resort is here: 12 tennis courts, lakes, Blue Ridge scenery, the stately 1896 Fairfield Inn and our luxury Villas. Come up for a day, or a lifetime. Call 704-743-3441 or write Sapphire Valley, Star Route 70, Box 80, Sapphire, N.C. 28774. Attn: K. M. Wright

SapphireValley

Brown Bag Permit No. 2265

BRIEF SUMMARY OF
PRESCRIBING INFORMATION
ANTIMINTH® (pyrantel pamoate)
ORAL SUSPENSION

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13μg/ml) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with preexisting liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg of pyrantel base/ml) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg/lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 ml of Antiminth per 10 lb. of body weight. (One teaspoonful=5 ml.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

How Supplied. Antiminth Oral Suspension is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg pyrantel base per ml, supplied in 60 ml bottles and Unitcups™ of 5 ml in packages of 12.

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Please see prescribing information on facing page. NSN 6505-00-148-6967

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(pyrantel pamoate) equivalent to 50mg pyrantel/ml

Application

FOR SPACE IN THE SCIENTIFIC EXHIBIT SECTION

1976 Annual Meeting — Kentucky Medical Association

Ramada Inn-Bluegrass Convention Center — **Louisville, Kentucky** — **September 28, 29, 30**

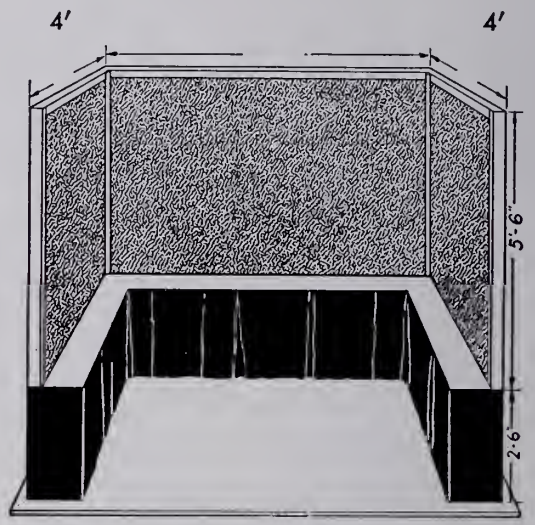
Fill Out and Mail to:

RICHARD A. KIELAR, M.D., Chairman
Scientific Exhibits Committee
Kentucky Medical Association
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Applications for space should be received before July 1, 1976.

The Kentucky Medical Association welcomes and supports scientific exhibits as a facet of continuing postgraduate education.

KAFP allows one credit hour for each hour of participation and presentation of scientific exhibits up to 15 hours. AMA allows up to 10 hours for AMA Category 4 credit.



1. Title of exhibit _____

2. Name(s) of exhibitor(s) _____

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3. Institution if other than exhibitor _____

4. Amount of backwall footage required _____
   (All side walls are four feet. This footage should **not** be included in your total.)
   SHELF DESIRED? Yes_____ No _____

5. Will summary printed matter be available or obtainable for the interested physician? _____

6. Indicate sources of assistance provided to you in connection with this exhibit _____

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7. Has this exhibit been displayed before? If so, when & where? _____

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8. It is required that you attach a brief outline of your exhibit to include: (a) content of the presentation, and (b) the method, eg., equipment to be used to present the content. NOTE: ANY EQUIPMENT WHICH WILL CREATE NOISE SHOULD NOT BE USED DURING THE GENERAL SESSIONS AND, AT OTHER TIMES, SHOULD BE CONTROLLED BY HEAD OR EAR PHONES OR SOME OTHER TYPE MUFFLING DEVICE.

Date _____ _____
Signature of Applicant

- **KMA provides, without cost to the exhibitor, simple shelves, bracket lights and a title sign.**
- **Spotlights, view boxes, furniture, decorations, etc., may be furnished by the exhibitor or may be rented, if desired, by applying directly to the Joseph T. Griffin Company, 704 West Main Street, Louisville, Kentucky 40202**
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ore prescribing, see complete prescribing in- nation in SK&F literature or *PDR*. The fol- ing is a brief summary.

'arning
his fixed combination drug is not indi- ted for initial therapy of edema or hyper- nsion. Edema or hypertension requires erapy titrated to the individual patient. If e fixed combination represents the dosage determined, its use may be more convenient patient management. The treatment of ypertension and edema is not static, but ust be reevaluated as conditions in each atient warrant.

ications: *Edema:* That associated with con- tive heart failure, cirrhosis of the liver, the hrotic syndrome; steroid-induced and idio- hic edema; edema resistant to other diuretic rapy. *Mild to moderate hypertension:* Useful- s of the triamterene component is limited to potassium-sparing effect.

ntraindications: Pre-existing elevated serum assium. Hypersensitivity to either component. ntinued use in progressive renal or hepatic sfunction or developing hyperkalemia.

rnings: **Do not use dietary potassium supple- nts or potassium salts unless hypokalemia velops or dietary potassium intake is markedly paired.** Enteric-coated potassium salts may use small bowel stenosis with or without eration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 capsules; in Single Unit Packages of 100 (intended for institutional use only).

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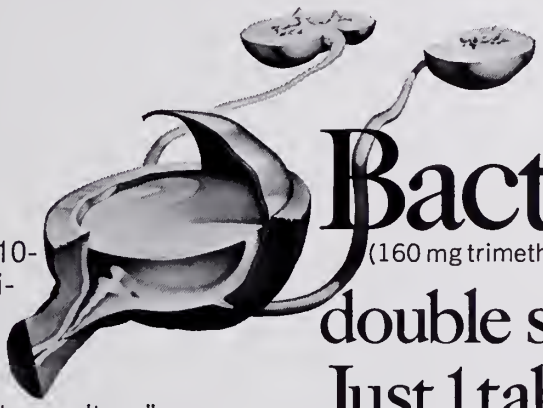
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10-day Bactrim therapy outperforms 10-day ampicillin therapy.



In a multicenter, double-blind study of patients with chronic or frequently recurrent urinary tract infection, Bactrim 10-day therapy outperformed ampicillin 10-day therapy by 27.2%, when comparing patients who maintained clear cultures for eight weeks. Criterion for "clear culture" was 100,000 or fewer organisms/ml of urine.

While adverse reactions were mild (*e.g.*, nausea, rash), more serious reactions can occur with these drugs. See manufacturers' product information for complete listing.

Note: Bactrim single strength tablets were used in these clinical trials. However, studies have established the bioequivalency of Bactrim DS with the single strength tablets.

Bactrim™ DS
(160 mg trimethoprim and 800 mg sulfamethoxazole)

double strength tablets Just 1 tablet B.I.D.

Bactrim™
(80 mg trimethoprim and 400 mg sulfamethoxazole)

2 tablets B.I.D.

For chronic or frequently recurrent cystitis and pyelonephritis due to susceptible organisms.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Chronic urinary tract infections evidenced by persistent bacteriuria (symptomatic or asymptomatic), frequently recurrent infections (relapse or reinfection), or infections associated with urinary tract complications, such as obstruction. Primarily for cystitis, pyelonephritis or pyelitis due to susceptible strains of *E. coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris* and *Proteus morganii.*

NOTE: The increasing frequency of resistant organisms limits the usefulness of antibacterials, especially in these urinary tract infections. The recommended quantitative disc susceptibility method (*Federal Register, 37*:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers.

Warnings: Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted. **Data are insufficient to recommend use in infants and children under 12.**

Precautions: Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for children under 12. Usual adult dosage: 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

For patients with renal impairment:

Creatinine Clearance (ml/min)	Recommended Dosage Regimen
Above 30	Usual standard regimen
15-30	1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) every 24 hours
Below 15	Use not recommended

Supplied: Double Strength (DS) tablets, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100. Tablets, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole — bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40, available singly and in trays of 10.

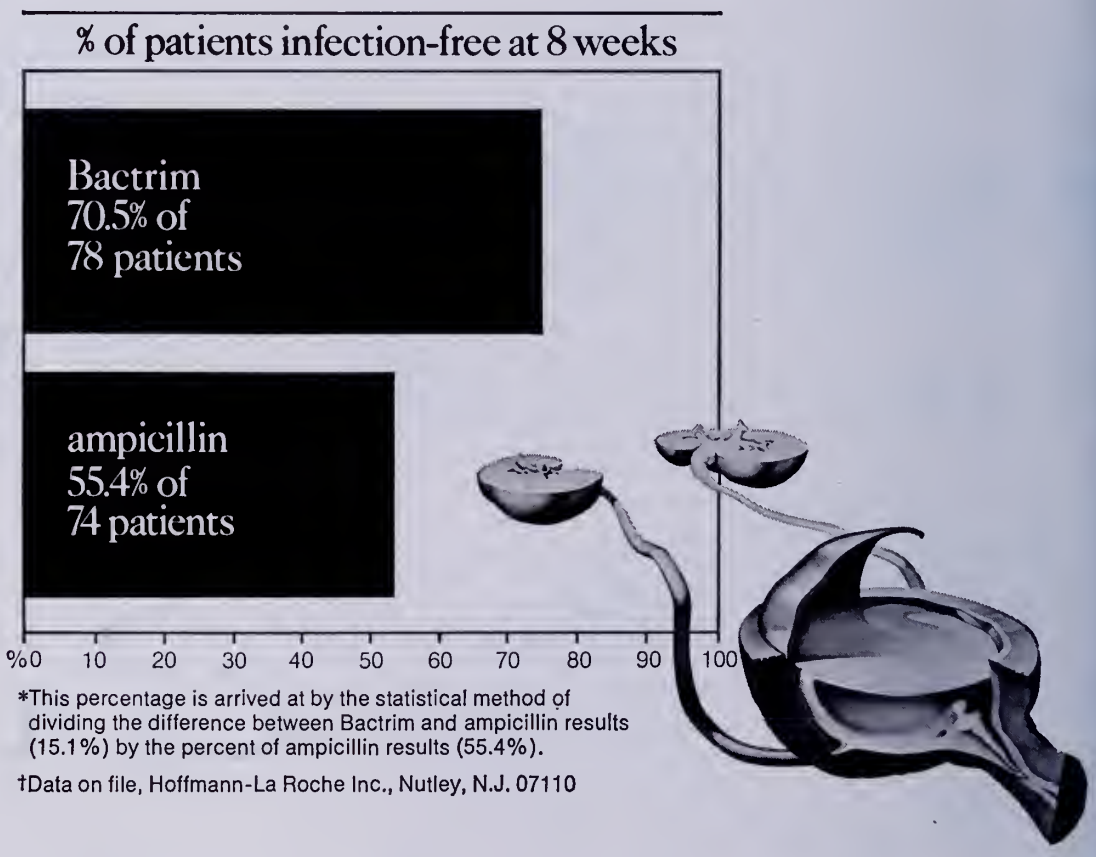
Oral suspension, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole; fruit-licorice flavored — bottles of 16 oz (1 pint).

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In a multicenter study of patients with chronic or frequently recurrent urinary tract infection

Bactrim™ was 27.2%* more effective than ampicillin in keeping patients infection-free for 8 weeks.†



*This percentage is arrived at by the statistical method of dividing the difference between Bactrim and ampicillin results (15.1%) by the percent of ampicillin results (55.4%).

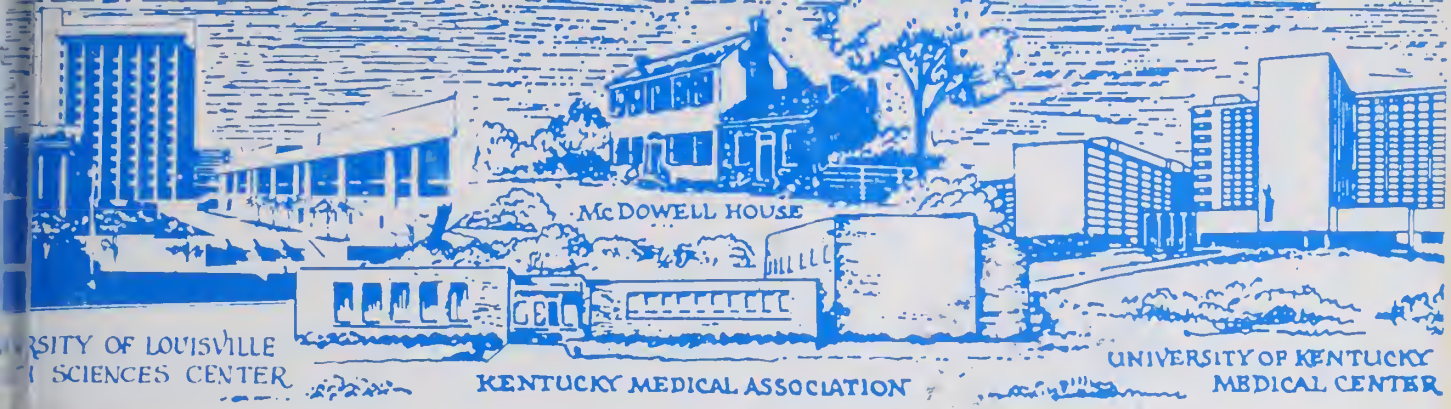
†Data on file, Hoffmann-La Roche Inc., Nutley, N.J. 07110

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Bactrim™
(80 mg trimethoprim and 400 mg sulfamethoxazole)
2 tablets B.I.D.

Please see summary of product information on preceding page.

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The Journal of The KENTUCKY Medical Association

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Hamid Sheikh, M.D. 233

SENATE BILL NO. 248 245

Complete Contents on page 217

LUME 74 MAY 1976 NUMBER 5

Both often



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.



Valium® (diazepam) IV

2-mg, 5-mg, 10-mg scored tablets

in psychoneurotic anxiety states with associated depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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Journal of The KENTUCKY Medical Association

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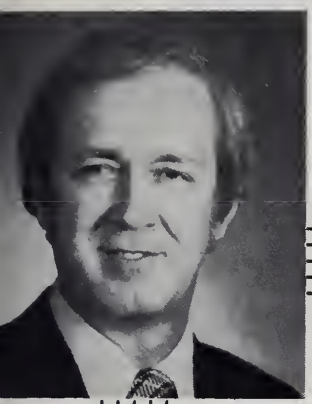
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15th ....HAROLD L. BUSHEY, 406 Knox St., Box 770, Barbourville 40906 (606) 546-3024 1978

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MESSAGE FROM THE PRESIDENT



"Mirror, mirror—on the wall."

The medical profession is, in the opinion of the author, reaching a point where we must take a good hard look at ourselves in light of current events and philosophy. As I draw to the end of my term as your President, and having recently completed work with the General Assembly, I find that the medical profession is no longer held in high regard by the public as it once was. This is not to say that individual physicians in the eyes of the patients are not held in high regard, for certainly this continues to be true and is the very basis of the doctor-patient relationship. However, in the Halls of Frankfort and almost on a daily basis in the press, the medical profession is bombarded by unflattering comments and accusations. A few physicians in our midst are, in the eyes of the President, causing the wrath of the public to descend upon all of us and as a result there is a growing cry for more strict control of the medical profession. As I see it, in my last few months of the Presidency, we must therefore take a good look at ourselves.

Recently I have asked the Board of Trustees to appoint two committees to give an overall purview of organized medicine's Peer Review policy and the problem of ever-rising health care costs. In regards to the former, I think it is well to remember that KMA has through the years established Peer Review bodies which are, in my opinion, effectively functioning. These include the Claims and Utilization Review Committee which has to do with the adjudication of claims rendered to patients and third parties. The Claims and Utilization Review Committee has been very effective through the past few years and methodologies increasing their effectiveness are continually in progress. The Judicial Council of the KMA deals with the ethical behavior of physicians and makes appropriate recommendations and judgements on matters brought before them either by physicians or the public. The Judicial Council has effectively served medicine in an exemplary fashion. The Medical Licensure Board is the ultimate licensing authority set up by the state government, but under the control of the physician. This body has the awesome responsibility of determining whether or not an individual physician may practice medicine. The Sick Physician Committee recently formed is also active on a behind-the-scene basis working with physicians who reportedly have ill health affecting their practice. Finally the question of a quality review process must be looked at by organized medicine. It is in this field, in the eyes of your President, that we can make some definite improvements. Hopefully the newly formed Ad Hoc Committee can make some specific recommendations in this regard.

The ever present problem of growing health care costs continues to be with us and is a major concern to the public. Accordingly, another committee is being formed to meet with other interested parties in an effort to come up with some specific recommendations as to how we, as physicians, can help in the curtailment of health care costs. The recently experienced problem of malpractice can serve only as an example as to rising costs of practicing medicine. However, individually and as a profession, we must attempt to find some solution, for inappropriate as it may seem, physicians themselves are being blamed for a major portion of this trend. Therefore, in addition, the public must be made aware as to the reason for increased health care costs. This subject is particularly germane in the field of politics where the hue and cry is for a National Health Insurance program.

These are but two areas where the medical profession must address itself. It is appropriate therefore that we look at the mirror on the wall.

David A. Shaw

A Link in the Chain

auxiliary

The Spring Board meeting of the Auxiliary was held to coincide with the 133rd Tater Day near Benton at the Ken Bar Resort. Trading of ideas, concerns, successes, and crafts was the theme. The component auxiliaries presented ways each served a basic need in their individual communities. Outstanding ideas shared included:

Jefferson County conducted three classes in food preparation and basic nutrition to senior citizens in high rise apartment complexes. Auxiliary members demonstrated the preparation of recipes that appeared in a booklet which was given to each person. The recipes stressed ease of preparation, good nutrition, servings for one or two persons, and inexpensiveness.

Harlan County Medical Auxiliary was presented the Group Effort Award on April 1 from the Kentucky Public Health Association for their screening program for scoliosis conducted in the public schools of Harlan County.

Boyd-Carter-Greenup Counties worked on "GEMS" program (Good Emergency Mother Substitute), a comprehensive course in babysitting. Over 50 girls participated this year in the program which was conducted on four consecutive Saturdays for girls 12 years and older.

Fayette County Auxiliary worked with the Lexington Jaycees and the U of K College of Social Professions to hold a Symposium on Child Abuse. The Community Child Abuse Committee was formed as a result and is chaired by an auxiliary member. This group formulated a lay therapist program for abusive patients and trained 20 persons to help social workers with these parents. Each lay therapist assigned by the Department for Human Resources has his or her own case to work with for a six-month commitment. A "Parents Anonymous" group has been formed by the Auxiliary with the guidance of the citizens group.

Hopkins County has led a physical fitness program for the family, part of which includes a mini-checkup for all the physicians. Pike County worked with Mary Fox, M.D., to screen the hearing of all children in grades 3, 5, and 7 in the public schools of Pike County.

McCracken County worked with a comprehensive pre-school screening program involving readiness, learning difficulties, speech, coordination, and a physical screening by a nurse. Problems detected were followed up by auxiliary members.

AMA AUXILIARY'S BICENTENNIAL CONVENTION

Dallas, Texas, Statler-Hilton Hotel, June 27-30, 1976

For the second year, the Auxiliary, together with the AMA Council on Scientific Assembly, will present several special interest seminars, combined with business sessions, educational program, and social events. Features of the meeting include:

Luncheon speakers, Bess Myerson on Monday and Michael DeBakey, M.D., on Tuesday. "Investment, Recreation, and Retirement Real Estate" is Sunday's topic. Business Sessions for the Delegates. Workshops on AMA-ERF, Legislation, Membership, Project Bank, Communications, and Treasurers. Bicentennial opening pageant will highlight each state as it entered the Union. Tour of Old City Park, a 19th century restoration of early Dallas with dedication by Mrs. Erle Wilkinson, AMA Auxiliary President, and Max Parrott, M.D., AMA President, of a doctor's office in a restored Victorian cottage. Children's activities. Texas-Style Barbecue. "Mame" with Angela Lansbury.

Don't miss this great meeting including these and many more features.

MRS. WALLY MONTGOMERY, PRESIDENT
AUXILIARY TO KMA

POSTGRADUATE OPPORTUNITIES

IN KENTUCKY

MAY

11-12 Practice Management Workshop, sponsored by KMA and AMA, Ramada Inn, Louisville

16 Nephrology Workshop*, University of Kentucky Medical Center, Lexington

17-18 "Care of the Infant with Respiratory Distress*", University of Kentucky Medical Center, Lexington

19-20 Annual Meeting, Kentucky Chapter, American Academy of Pediatrics, Big Spring Country Club, Louisville

19-20 Annual Assembly, Kentucky Academy of Family Physicians, Ramada Inn, Louisville

20-22 Fifth Biennial Symposium, "Cancer in Women," Galt House, Louisville

22-23 Annual Meeting, Kentucky EN&T Society, Mammoth Cave National Park, Mammoth Cave

25 Postgraduate course, "Clinicopathological Conference," (Speaker: Alfred Krake, M.D., Medical Director, Mountain Comprehensive Health Clinic, and Agapito Del Rosario, M.D., Pathologist, Whitesburg Appalachian Regional Hospital), Whitesburg

26 "Immunology and Malignant Disease,"** St. Anthony Hospital, Louisville

26-28 "Law and Medicine—1976*", University of Kentucky Medical Center and Law Building, Lexington

JUNE

2-3 KMA Emergency Health Care Seminar, Executive West, Louisville

4-5 Annual Meeting, Kentucky Occupational Medicine Association, Galt House, Louisville

11-12 Cardiovascular Diagnosis and Treatment Symposium*, University of Kentucky Medical Center, Lexington

JULY

25 Postgraduate course, "Trauma and Its Management in Kentucky," (Speaker: Kimball I. Maull, M.D., Assistant Professor of Surgery, University of Kentucky Medical Center), Whitesburg Appalachian Regional Hospital, Whitesburg

IN SURROUNDING STATES

JUNE

7-11 18th Annual Benjamin Felson lectures in Diagnostic Radiology, University of Cincinnati College of Medicine, Cincinnati

26—July 1 Annual Convention, American Medical Association, Dallas

For further information, contact: Frank R. Lemon, M.D., Associate Dean for Continuing Education, University of Kentucky College of Medicine, Lexington 40506

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Testing in Humans: Who, Where & When.

the weight of ethical opinion:

Few would disagree that the effectiveness and safety of any therapeutic agent or device must be determined through clinical research.

But now the *practice* of clinical research is under appraisal by Congress, the press and the general public. Who shall administer it? On whom are the products to be tested? Under what circumstances? And how shall results be evaluated and utilized?

The Pharmaceutical Manufacturers Association represents firms that are significantly engaged in the discovery and development of new medicines, medical devices and diagnostic products. Clinical research is essential to their efforts. Consequently, PMA formulated positions which it submitted on July 11, 1975, to the Subcommittee on Health of the Senate Labor and Public Welfare Committee, as its official policy recommendations. Here are the essentials of PMA's current thinking in this vital area.

1. PMA supports the mandate and mission of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research and offers to establish a special committee composed of experts of appropriate disciplines familiar with the industry's research methodology to volunteer its service to the Commission.

2. PMA supports the formation of an independent, expert, broadly based and representative panel to assess the current state of drug innovation and the impact upon it of existing laws, regulations and procedures.

3. When FDA proposes regulations, it should prepare and publish in the *Federal Register* a detailed statement assessing the impact of those regulations on drug and device innovation.

4. PMA proposes that an appropriately qualified medical organization be encouraged to undertake a comprehensive study of the optimum roles and responsibilities of the sponsor and physician when company-sponsored clinical research is performed by independent clinical investigators.

5. PMA recognizes that the physician-investigator has, and should have, the ultimate responsibility for deciding the substance and form of the informed consent to be obtained. However, PMA recommends that the sponsor of the experiment aid the investigator in discharging this important responsibility by providing (1) a document detailing the investigator's responsibilities under FDA regulations with regard to patient consent, and (2) a written description of the relevant facts about the investigational item to be studied, in comprehensible lay language.

6. In the case of children, the sponsor must require that informed consent be obtained from a legally appropriate representative of the participant. Voluntary consent of an older child, who may be capable of understanding, in addition to that of a parent, guardian or other legally responsible person, is advisable. Safety of the drug or device shall have been assessed in adult populations prior to use in children.

7. PMA endorses the general principle that, in the case of the mentally infirm, consent should be sought from both an understanding subject and from a parent or guardian, or in their absence, another legally responsible person.

8. Pharmaceutical manufacturers sponsoring investigations in prisons must take all reasonable care to assure that the facilities and personnel used in the conduct of the investigations are suitable for the protection of participants, and for the avoidance of coercion, with a respect for basic humanitarian principles.

9. Sponsors intending to conduct non-therapeutic clinical trials through the participation of employee volunteers should expand the membership and scope of its existing Medical Research Committee, or establish such an internal Medical Research Committee, with responsibility to approve the consent forms of all volunteers, designs, protocols and the scope of the trial. The Committee should also bear responsibility to ensure full compliance with all procedures intended to protect employee volunteers' rights.

10. Where the sponsor obtains medical information or data on individuals, it shall be accorded the same confidential status as provided in codes of ethics governing health care professionals.

11. PMA and its member firms accept responsibility to aid and encourage appropriate follow-up of human subjects who have received investigational products that cause latent toxicity in animals or, during their use in clinical investigation, are found to cause unexpected and serious adverse effects.

12. PMA supports the exploration and development by its member companies of more systematic surveillance procedures for newly marketed products.

13. When a pharmaceutical manufacturer concludes, on the basis of early clinical trials of a basic new agent, that a new drug application is likely to be submitted, a proposed development plan accompanied by a summary of existing data, would be submitted to the FDA. Following a review of this submission, the FDA, and its Advisory Committee where appropriate, would meet with the sponsor to discuss the development plan. No *formal* FDA approval should be required at this stage. Rather, the emphasis should be on identification of potential problems and questions for the sponsor's further study and resolution as the program develops.

The PMA believes that health professionals as well as the public at large should be made aware of these 13 points in its Policy on Clinical Research. For these recommendations envisage constructive, cooperative action by industry, research institutions, the health professions and government to encourage creative and workable responses to issues involved in the clinical investigation of new products.

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Dermatologic Disorders in Athletes†

Sigfrid A. Muller, M.D.*

Rochester, Minnesota

Skin disorders are common in athletes and are similar to dermatologic disorders seen in nonathletes, except that the skin problems are likely to be aggravated by the special training rigors in which athletes are engaged.

ALTHOUGH skin disorders are common in athletes,[1] as well as in all persons engaged in special physical activity, relatively little effort is usually made to prevent these disorders or to treat them adequately. Disabilities from skin diseases rarely make the sports pages, but such disabilities do make life miserable and often reduce the efficiency of the athlete. The medical history of the Olympic games[2] does not mention skin disorders, but no doubt the outcome of many events was decided by the severity of callosities, warts, blistered feet, and cutaneous infections and rashes.

Cutaneous disorders of athletes are similar to those seen in nonathletes, except that the disorders frequently are aggravated and persist longer as a result of the environmental conditions and the training and competitive rigors to which athletes subject themselves. Some of the important dermatologic disorders seen in athletes are listed in Table 1. I will not discuss the details of treatment and will emphasize only a few special points. Standard texts replete with multiple choices for treatment can be readily consulted by physicians once the correct diagnosis has been made.[3]

†*Paper presented at the 1975 KMA Annual Meeting on September 24 in Louisville.*

**Professor of Dermatology, Mayo Medical School, Consultant, Department of Dermatology, Mayo Clinic and Mayo Foundation, Rochester*

Skin Problems Related to Trauma

Blisters. Blisters accompany every athletic endeavor that affects the feet in running sports, the hand in crew and stick sports, and specific fingers in sports requiring specialized fingergrips such as fencing and baseball. Blisters are due to excessive friction. Unusual exercises, especially early in the athletic season, and the use of new or poorly fitting shoes are the most frequent causes. Excessive shear forces are generated vertically, backward and forward, and laterally, but the horizontal forces are the most important factors in causing blisters on the feet. Most padding materials, such as moleskin and felt, cushion the vertical forces and are of limited help in preventing blisters. They do not decrease the other types of shear forces, unless specially made materials are used. Closed-cell rubber materials have received extensive attention and differ from conventional open-cell foam in that each individual cell is independent of its surrounding cells.[4] Thus, the closed-cell materials have a ball-bearing-type of effect, absorbing various lateral and oblique forces as well as vertical ones. A neoprene polymer insole can be used in athletic shoes, and usually, only ⅛-inch thickness is necessary for protection. A closed-cellular polyvinylchloride-type of material has been developed for the dorsa and sides of the foot and other areas where vertical forces are much less. The insoles will last for three to six months, whereas tape that is applied before sports participation is replaced after a few hours or days. Experimental studies have indicated that the application of cyanoacrylates to blisters is very effective in relieving pain and permitting continuation of activities without interfering with healing.[5]

Hot weather facilitates the development of

blisters, as do preexisting inflammatory disorders of the skin or underlying bony abnormalities. There is also great variation among athletes in the ease with which blisters form. Friction blisters, which are the common type seen in athletes, are located intraepidermally and usually occur just below the granular layer of the epidermis. Additional shear forces extend the blister horizontally and vertically so that eventually it involves the dermis.

A friction blister that forms under a callus is much more painful than one that forms elsewhere and usually occurs later in the athletic season. The callus presses into the blister with vertical force, causing much more acute disability.

Abrasions, Lacerations, and Ulcers. The least worrisome and most frequent type of direct skin trauma is the abrasion, which is seen in every participant of an active sport. When it occurs in turf sports, on cinder tracks, or on similar surfaces, contamination and foreign bodies can be complicating factors and should be carefully treated.

A rare type of lesion in this category is that caused by an exploding golf ball.[6] The liquid center of the golf ball is under pressures as high as 2,500 lb/sq in—a force sufficient to drive the material through a person's skin without leaving obvious surface marks or pain. The liquid center contains a substance such as barium salt, silicone, lead, ethylene glycol, or gelatin. The liquid center explodes if the outer coat is weakened enough. Histologically, a low-grade inflammation is usually associated with the foreign body reaction. Solid golf balls are now available, but liquid-center golf balls will still be marketed for a long time.

Dermal and Subcutaneous Nodules. Fibrotic masses in the dermis and subcutaneous tissues occur after repeated local injury and hemorrhage, with healing by scar formation usually at specialized sites. Special examples are the surfer's nodules, which are unusual collections of nodular lesions that occasionally ulcerate and are caused by the kneeling of the surfer on the board, balancing on the tibial prominences, mid-dorsa of the feet, and dorsa of one or more metatarsophalangeal joints.[7] Prolonged pressure at these sites produces the fibrotic nodular lesions that also may be associated with osseous changes.

Cutaneous Hemorrhage. Bleeding into the skin or under the nails as a result of repetitive trauma is recognized much more frequently now—a likely result of the increased participation in sports by more athletes and by more of the public. "Tennis toe" has become a common disability of tennis players, usually in those who are more than 35 years of age.[8] This condition involves variably severe subungual hemorrhages under the hallux or the second toenail, whichever is the longer and sometimes affects other toenails as well. It is caused by the collision of the toenail with the tennis shoe. Hard surfaces and ill-fitting shoes are important aggravants. As a chronic sufferer of this condition for 10 years or more, I have not been able to prevent the problem, although tightly lacing the shoes and retying the laces when they have become loosened have been the most helpful measures for me.

Calcaneal petechiae (or black heel) is another type of minor cutaneous bleeding that is produced by trauma. In this condition, small petechial-like lesions, or blood blisters, are seen on the sides or back of the heel. These are seen mainly in athletes engaged in the running sports. Occasionally, these lesions may be mistaken for pigmented nevi.[9] Black palms are similar petechial-like lesions that have been seen in weight lifters.[10]

Infectious Disorders

Folliculitis is not an uncommon problem in contact sports or in sports that require heavy equipment to be worn and is associated with profuse sweating. Usually, a careful cleansing of the involved area and the use of a mild antiseptic after bathing, such as rubbing alcohol or a drying lotion, will suffice. If folliculitis is not promptly controlled or if furuncles develop, then practice and competition should be stopped for several days, and the standard medical treatment for infections of this type (which include pyodermas and cellulitis) should be administered. Rarely, an unusually virulent staphylococcal organism will be responsible and may affect several members of the team in epidemic form. Such an occurrence was recently seen in a Minnesota high school, resulting in cessation of all physical education classes that used the locker room facilities and in the cancellation of a football game. According to a newspaper report,[11] it was only the third time in Minnesota high school football history that an infectious disease had forced cancellation of an athletic event. This, in itself, seems to be a remarkably good record.

Table 1

SOME DERMATOLOGIC DISORDERS COMMONLY SEEN IN ATHLETES

I. Disorders related to trauma
   1. Friction blisters
   2. Callosities
   3. Abrasions, lacerations, and ulcerations
   4. Dermal and subcutaneous nodular fibroses: cauliflower ears and surfer's nodules
   5. Cutaneous hemorrhage: tennis toe, black heel, subungual hematomas

II. Infectious disorders
   1. Bacterial infections
      A. Pyodermas, furunculosis, folliculitis, impetigo
      B. Swimming pool granulomas
   2. Viral diseases
      A. Warts
      B. Molluscum contagiosum
      C. Herpes simplex
   3. Yeast and fungal infections
      A. Candidiasis
      B. Erythrasma
      C. Tinea pedis, tinea cruris

III. Aggravation of preexisting skin disorders
   1. Acne vulgaris
   2. Atopic dermatitis
   3. Asteatosis

IV. Other dermatologic problems
   1. Trichorrhexis nodosa
   2. Contact dermatitis
   3. Intertriginous dermatitis
   4. Miliaria

A more recently recognized epidemic skin infection affects wrestlers.[12] Widespread impetigo-like lesions caused by herpes simplex virus have developed after the direct cutaneous inoculation of the virus during a wrestling match. Athletes who have herpes simplex lesions, particularly those in contact team sports, should not participate in body contact activities and should be especially careful to reserve their towel and toilet articles for their private use only.

Tinea pedis and tinea cruris can affect persons who share the same locker and shower room facilities, but epidemics are not commonly reported because the infections usually are mild and simple treatment is effective. Cross infections may occur by the sharing of benches, shower rooms, and other locker room facilities where infectious fungal elements can be disseminated over a moist floor or bench surface by infected persons. The use of shower clogs, careful drying after bathing, the daily change of clothing, and adequate daily cleaning and (most importantly) drying of the locker room surfaces are helpful. Some of the newer topical antifungal agents used today are miconazole nitrate and haloprogin, which are available by prescription in cream, liquid, or powder form. These have the advantage of being effective against *C. albicans* infections, as well as erythrasma. The latter is a brownish scaling rash due to *Corynebacterium tenuis*, a common diphtheroid that produces a mildly inflammatory rash frequently confused with tinea cruris or tinea pedis involving the webs of the toes.

The rash in infections of the skin may not be caused by fungi at all but may have some other cause, such as contact dermatitis, atopic dermatitis, dyshidrotic eczema, or pustular psoriasis. Thus, any resistant or persistent rash of the hands, feet, or other skin areas which does not readily respond to treatment should be carefully reevaluated, and consideration should be given to the possibility of a mistaken diagnosis. Physicians who take care of athletes should be prepared to carry out potassium hydroxide examinations of skin scales for identification of fungal hyphae and occasionally to take cultures when infection with candidiasis or dermatophytosis is a possibility.

Aggravation of Preexisting Skin Disorders

Asteatosis, or chapped skin, occurs principally in cold, dry weather, especially when winters are prolonged. Participants in swimming and winter outdoor sports have the highest incidence of involvement. The frequent use of a good lubricant and the avoidance of excessive cold or prolonged exposure are all that are usually necessary for cure.

The problem is most serious in swimmers who have atopic dermatitis. Generally, patients with atopic dermatitis do not tolerate well the rigors of any strenuous competitive athletics. Trauma, intense sweating, and miliaria are principal aggravants and precipitating factors of this form of eczema. Atopic dermatitis not uncommonly presents as atypical hand or foot dermatitis frequently mistakenly treated as fungal infections. In some well-motivated athletes, occasional mild involvement with atopic dermatitis need not disqualify the athlete from competition.

Acne vulgaris occasionally becomes severe and extensive in the young boy or girl while participating in track, tennis, hockey, football, or basketball. I attribute this aggravation to the intense sweating, maceration of skin, and physiologic deficit that result from the repeated and prolonged maximum physical efforts required by today's coaches and adolescent peers who drive the young people to higher performance and achievement. These young athletes are almost always

considerably underweight. In addition to prescribing the usual modalities for the treatment of severe cystic acne vulgaris (the administration of tetracycline orally in full doses, ultraviolet light once or twice a week, drainage of comedos and acne cysts, hot sulfur compresses such as Vleminckx solution diluted 1:32, and other conventional topical acne therapy), I have emphasized the need for sleeping and eating more. When the condition is severe and outpatient treatment has failed, these patients should be hospitalized for two or three weeks and treated intensively, much as indicated above, and should receive a high caloric diet. Frequently, they require daily periods of acne surgery of 30 minutes or longer—something that cannot be done readily on an outpatient basis. Many of these patients improve in a dramatic fashion when this treatment program is used.

Other Dermatologic Problems

Trichorrhexis nodosa is a disorder of the hair in which multiple nodular swellings occur along the hair shaft as a result of transverse fractures of the hair shaft with broom-like brush-apposing interfaces. It is seen with various rare congenital disorders, but it also has been noted in swimmers who are exposed to the sun for long periods.[13] The hair is frequently bleached, dry, and fragile, and defects in the hair shaft can be readily identified with the magnification provided by a hand lens. The use of a bathing cap when swimming and of a hat while in the sun may minimize further damage to the hair. The use of so-called hair-repair shampoos and protein rinses frequently improves the cosmetic appearance and feel of the hair, and one should not be deterred from using them just because of the excessive and sometimes foolish advertising claims of the manufacturers.

Contact dermatitis may masquerade as tinea pedis or neurodermatitis. It should be considered as a possible diagnosis in every case of atypical foot dermatitis.

Intertrigenous dermatitis is usually not a problem for athletes who have lean muscular bodies. However, athletes who are recruited because of their large size and weight, especially for sports such as football and weight lifting, may have intertrigenous dermatitis in their abdominal or gluteal body folds and also may be subject to recurrent bouts of candidiasis or furunculosis at these sites, particularly if they have a tendency for diabetes mellitus. These athletes should never be encouraged to increase their weight but should be given dietary instructions to reduce their weight to more satisfactory levels.

Summary

Skin disorders are common in athletes and are similar to dermatologic disorders seen in nonathletes, except that the skin problems are likely to be aggravated by the special training and competitive rigors in which athletes are engaged. Diagnosis and treatment are also likely to be postponed and the problem minimized until either spontaneous resolution or physical incapacity results. In many of these disorders, preventive measures would be effective. In schools and sports organizations, the coaching staff and athlete should place greater emphasis on the prevention and care of dermatologic problems, and the team physician should be prepared to assist in this endeavor as well as to treat the many kinds of dermatologic problems that occur in athletes.

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Experimental Barium and Fecal Peritonitis: A Reevaluation†

Richard H. Daffner, M.D.*
Louisville, Kentucky

Experimental peritonitis was produced in dogs to reevaluate the effect of commercial barium and feces on the peritoneum. There was no significant difference in mortality using barium and feces combined than using feces alone. These data contradict previous experiments in this area. The earlier literature is reviewed.

ONE of the axioms in diagnostic radiology regarding contrast examinations of the gastrointestinal tract, is that the combination of barium and fecal material introduced inadvertently into the peritoneal cavity has a higher mortality and morbidity than either agent alone.[1,2,5,10,12] However, the clinical observation of several patients who survived colonic perforation with subsequent spillage of barium and fecal material into the peritoneal space prompted us to reevaluate the experimental data previously presented and to review the literature.

Material and Method

Thirty-five healthy mongrel dogs, each weighing from 15-26 kg, were used. All test material was introduced intraperitoneally using a syringe and needle. Abdominal radiographs of each dog receiving barium were made within one hour after injection to determine proper placement of the media. Rectal temperatures were taken on all dogs. A postmortem examination was performed on each dog that did not survive and cultures were obtained of peritoneal fluid and blood. Celiotomies were performed on survivors between 14 and 21 days following injection. The dogs were divided into five groups. Group 1 consisted of five dogs who received an intraperitoneal injection of 30 ml of nonsterile barium.* Group 2 consisted of 10 dogs who received a 30 ml intraperitoneal injection of a 10% w/v suspension of homologous feces. Group 3 consisted of 10 dogs who received an intraperitoneal injection of 15 ml unsterile feces suspension mixed with 15 ml unsterile barium. Group 4 consisted of five dogs who received a 30 ml intraperitoneal injection of sterile homologous feces (10% w/v). Group 5 contained five dogs who received an intraperitoneal injection of 15 ml sterile homologous feces mixed with 15 ml nonsterile barium.

The data are summarized in Table 1.

Results

Group 1 (Five Dogs)

There were no deaths. All animals had an elevation of temperature for several days following the injection. Celiotomy findings reveal adhesions and granuloma formation within the peritoneal tissue and omentum. There were no abscesses.

Group 2 (Ten Dogs)

There were four deaths, all within 24 hours following injection. Postmortem findings were those of hemorrhagic peritonitis with infarcts of the spleen, liver, kidneys, lungs, and heart. These are the findings of septicemia. Cultures of peritoneal fluid and blood showed Gram negative enteric organisms, Group-D Streptococci, *Staphylococcus aureus,* and *Clostridium perfringens.* All of these are common enteric organisms.

All six survivors had elevated temperature for several days following the injection. Celiotomy findings on the survivors included mild localized peritonitis with granuloma formation in five dogs and lymph node enlargement in one dog. One dog had no abnormal findings.

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**Intropaque (91% barium sulfate, U.S.P.), Lafayette Pharmacal Inc.—2 parts Barosperse (95% barium sulfate formulation), Mallinckrodt Chemical Works—1 part; each suspended in 3000 cc tap water.*

Table 1
SUMMARY OF RESULTS

Group	# Animals	Material Injected	# Deaths	Autopsy Findings	# Survivors	Celiotomy Findings
1	5	Nonsterile Barium	0	—	5	Adhesions & granulomas
2	10	Nonsterile Feces	4	Hemorrhagic peritonitis, infarcts, septicemia	6	Localized peritonitis, granulomas
3	10	Nonsterile Feces and Nonsterile Barium	3	Hemorrhagic peritonitis, infarcts, septicemia, gas infection (2/3)	7	Adhesions & granulomas Abdominal wall abscess (1/7)
4	5	Sterile Feces	0	—	5	Localized adhesions
5	5	Sterile Feces and Nonsterile Barium	2	Hemorrhagic peritonitis, infarcts	3	Localized granulomas and adhesions

Group 3 (Ten Dogs)

There were three deaths. Autopsy findings revealed hemorrhagic peritonitis with infarcts in a similar distribution to those of Group 2. Two of the dogs had gas infections as well. Organisms cultured were similar to those in Group 2.

All survivors had elevated temperatures for several days following injection. Celiotomy findings revealed adhesions and granulomas in all seven dogs. One dog had an abdominal wall abscess at the site of injection. Peritoneal fluid culture was sterile.

Group 4 (Five Dogs)

There were no deaths. All dogs had an elevated temperature for several days following injection. Celiotomy findings showed localized adhesions and no abscess formation. Cultures of peritoneal fluid were sterile.

Group 5 (Five Dogs)

There were two deaths. Autopsy findings revealed hemorrhagic peritonitis with infarcts similar to those seen in Group 2. Culture of the peritoneal fluid revealed coliform bacilli, Group D Streptococceae and *Staphylococcus aureus.* Celiotomies on the surviving animals showed localized granulomas and adhesions.

Bacterial cultures were performed on the barium suspension and no growth could be detected after 10 days. This is particularly notable since the barium sulfate powder is kept in nonsterile containers and is mixed with tap water.

Discussion

Barium sulfate has become the contrast medium of choice for roentgenographic examination of the gastrointestinal tract because of its high roentgenographic density, low absorption, and low cost. Complications resulting from its extensive use are few.[3,5,6,8,9,11]

The conclusions reached in previous animal experiments indicated that the most significant factor in determining morbidity and mortality was bacterial contamination by the intestinal contents.[1,2,10] These studies have shown a higher morbidity and mortality in the animals whose peritonitis was caused by a mixture of barium and fecal material. However, in reviewing the experimental data by these authors, it became apparent that the number of experimental animals used was insufficient for a statistically significant result to be obtained based on the sample numbers. The one exception to this was the experiment conducted by Sisel and his colleagues.[10]

Almond, Cochran, and Shucart included three animals each in their group which received nonsterile feces and a mixture of nonsterile barium and feces. Of the six animals used, the only survivor was in the group which received the nonsterile feces. There were three survivors in a group of 10 dogs which received nonsterile barium sulfate by intraperitoneal injection. Four additional groups of dogs received intraperitoneal injections of water soluble contrast material, sterile feces, and sterile U.S.P. barium respectively. There were no deaths in this group which could be attributed to the injection of contrast material. Four of the six dogs injected with water soluble contrast material mixed with nonsterile feces died. The conclusion based upon these experiments was that the mixture of nonsterile feces and barium was more lethal than either agent alone.[1,2]

Kleinsasser and Warshaw reported no survivors in a group of two dogs which received an intraperitoneal injection of barium and feces,

and in two additional dogs which received an intraperitoneal injection of stool alone. There were no deaths in the three groups which received intraperitoneal injections of nonsterile barium sulfate, sterile feces, and filtered feces. Their conclusion was that the presence of organisms is the sole cause of the extensive peritoneal reaction observed at autopsy upon the death of the animals.[5]

Recently, Sisel and his co-workers performed experimental colonic rupture in rabbits. The physiologic and pathologic conditions which could result in the accidental spillage of radiographic contrast material and feces were duplicated. Furthermore, they evaluated the effects of no treatment, early, and delayed treatment. The effects of barium sulfate, diatrizoate sodium, sodium chloride solution, and feces were compared. Of 10 animals which received intraperitoneal injections of barium only, three died. There were no deaths among the animals which received sodium chloride or diatrizoate sodium injections. Of 30 animals which underwent spillage of feces and barium there were only two survivors. Surgery and peritoneal lavage had little effect on this group.

However, in the group which received feces alone, five of the 10 died without treatment but there were no deaths in those animals treated within one hour by surgery or lavage, and only one death in 10 animals treated within one hour by surgery or lavage, and only one death in 10 animals treated after a four hour delay. There was a high mortality in the untreated group of animals which received feces mixed with either saline or the diatrizoate injections. Early treatment reduced this mortality to 40% and 50% respectively.[10]

The results of our experiment showed no significant difference in the number of survivors in the group of animals receiving nonsterile feces or mixture of nonsterile feces and nonsterile barium. Barium sulfate, U.S.P. is an inert substance. However, most commercial barium preparations in use today contain fillers and dispersing agents to make the barium suspend better. It is possible that these may play a role in the morbidity resulting from their inadvertent intraperitoneal introduction. Two of five of our experimental animals which received a mixture of sterile feces and the commercial barium preparation died of hemorrhagic peritonitis. Table 2 compares our results with those of other investigators.

Barium sulfate acts as a foreign material and incites a desmoplastic response when injected intraperitoneally. This is seen as the barium granuloma and as dense fibrous adhesions.[4,5,7,11,12] The work done by Zheutlin and co-workers demonstrated a tissue reaction as early as 60 minutes following the introduction of barium into the peritoneal cavity.[12] A histiocytic granuloma may be seen as early as four days following injection.[4] Indeed, 30% of the patients studied in one series required further surgery for adhesions caused by intraperitoneal barium.[12]

Our results indicate that the combination of barium and feces introduced into the peritoneal cavity carries no greater morbidity or mortality than feces alone. Culture of the barium itself showed it was incapable of sustaining bacterial

Table 2
SUMMARY OF RESULTS IN EXPERIMENTAL PERITONITIS

	Number of deaths/number of animals for each agent used							
Investigators	Unsterile Barium	Unsterile Feces	Unsterile Barium, Feces	Sterile Feces	Sterile Feces, Barium	Water Soluble Agents	Water Soluble, Unsterile Feces	Ref
Kleinsasser & Warshaw, 1951	0/6	2/2	2/2	0/5				5
Almond, Cochran, Shucart, 1961	7/10	2/3	3/3	0/3		0/10*	4/6	1,2
Sisel, Donovan, Yellin, 1972**	3/10	5/10	10/10			0/15	10/10	10
Daffner, 1974	0/5	4/10	3/10	0/5	2/5			

* One animal died of unrelated causes.
** All animals untreated.

life. However, the intense granulomatous reaction and adhesions formed by the presence of the barium should preclude its use in any patient suspected of having ruptured viscus (colon).

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Serous Cystadenoma of the Ovary with Fimbrial Ectopic Pregnancy

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A case of serous cystadenoma of the ovary coexisting with a fimbrial and omental ectopic pregnancy is described. Such a combination has not been previously reported.

JARCHO[6] reported that 5.9% of all ectopic pregnancies occur in the tubal fimbria. A review of the literature has not disclosed any other mention of fimbrial ectopic pregnancy.[1,2,4,5,8]

Case Report

HP, a 19-year-old gravida 1, para 1, was first seen in the Emergency Department of Louisville General Hospital on May 25, 1974. Her last menstrual period had begun on April 15, 1974. She complained of pain of two weeks duration in the lower part of her back and in the lower abdomen. On examination, a thick white leukorrhea was found. The uterus was described as being of 20 weeks gestational size. The cervix was tender on motion. The adnexa were bilaterally tender. No adnexal masses were described. A pregnancy test was negative and a smear was positive for gonococci. The patient was treated with procaine penicillin.

On July 16, July 22, and July 26, 1974, the patient returned to the Emergency Department with complaints of vaginal bleeding and abdominal cramps. Her vital signs were normal. A diagnosis of threatened abortion was made and the patient was referred to the high risk prenatal clinic where she was seen on August 2, 1974. At that time the patient gave the additional history of breast soreness and fetal movement and stated she thought she was pregnant.

A complete blood count and urinalysis were normal. The VDRL was weakly reactive.

The patient returned to the Emergency Department on September 18, 1974, complaining of vaginal bleeding. A fetal heart could not be auscultated nor located with a Doptone.

On bimanual examination, the uterus was felt to be of normal size. It was pushed to the left and anteriorly by the mass. A cystic mass was felt in the pelvis, separate from the uterus. Apart from this mass, no abnormalities could be detected in the adnexal region. A sonographic examination confirmed a cystic mass, 16 x 14 cm in size. A repeat pregnancy test was negative.

Chest x-ray and barium enema were normal. An intravenous pyelogram showed compression of the ureters by a pelvic mass, possibly ovarian in origin.

As the patient had repeated episodes of vaginal bleeding, a diagnostic dilation and curettage was done. The endometrial tissue showed non-specific endometritis.

An exploratory laparotomy was performed on September 24, 1974. An ovarian cyst 16 x 16 cm was found arising from the right ovary. An unruptured 6 cm x 4 cm ectopic gestational sac was found on the left fallopian tube. The sac was suspended between a single fimbria on one side and the omentum on the other side.

The ectopic pregnancy was removed intact with only minor disruption of the fimbria. A right salpingo-oophorectomy was done.

The pathology report confirmed a non-viable unruptured ectopic pregnancy and a serous cystadenoma.

The patient had an uneventful post-operative course.

Comments

Manka,[7] and Ellis and Beecham[3] have reported two separate cases of ectopic pregnancy associated with carcinoma of the cervix. Ellis and Beecham[3] have also reported two cases of cystic teratoma and ectopic pregnancy. The author could not find any case in the literature similar to that reported. It is conjectural whether the fimbrial ectopic pregnancy was secondary after being aborted from the tube or represented a primary implantation on the fimbria.

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GRAND ROUNDS

The University of Kentucky College of Medicine

This Journal feature will be presented alternately by the University of Louisville and the University of Kentucky Departments of Medicine and Departments of Surgery. We hope to have these features revolve around subjects of immediate practical interest to the practicing physician; and, for those of us not able to attend grand rounds in the teaching centers as often as we might, we hope this will represent a bit of a refresher course.

Caroli's Disease: An Illustrative Case With Five-Year Followup

William R. Meeker, Jr., M.D.*

Case Presentation: *P.W.* #13-76-38-3: This 34-year-old single, white female social worker was first admitted to the neurology service at the University of Kentucky Medical Center from December 4-19, 1969, for evaluation of progressive blindness, right loin pain, and left sensory loss. She had been admitted after evaluation in the Ophthalmology Clinic where she was found to have retinitis pigmentosa. Past history revealed that she had been treated for polydactyly by amputation of supernumerary digits on the right hand and both feet in infancy. Her father was alleged to have difficulty with vision in one eye. There was no known consanguinity in the parents. Review of systems disclosed that menarche had occurred at age 15 and occurred every 30 to 40 days lasting three to four days. Physical examination disclosed an adult female who had marked truncal obesity and who was almost totally blind. Mental testing disclosed average intelligence. Positive physical findings included thoracic scoliosis, atrophy of the intrinsic muscles of the left hand together with decreased size of the left upper extremity, a left breast mass, generalized thyroid enlargement, decreased corneal sensation bilaterally, decreased retinal artery calibre, grossly constricted visual fields, and subjective diminution in touch and pin-prick sensation on the left side of the body. Normal female secondary sexual characteristics were noted. Laboratory studies giving abnormal results included urinalysis and urine cultures which showed evidence of infection with a proteus species and *Streptococcus fecalis;* an intravenous pyelogram which showed bilateral blunting and clubbing of the calyceal systems and pelves bilaterally without ureteral dilatation. Endocrinology consultant suggested a diagnosis of Laurence-Moon-Biedl-Bardet syndrome based on the presence of three of the five cardinal features of this clinical entity: obesity, polydactyly, and retinitis pigmentosa. A renal medicine consultant suggested a diagnosis of chronic pyelonephritis and recommended management measures as well as oral cholecystogram to rule out gallbladder disease as a cause of her loin pain.

She underwent excisional biopsy of the breast mass under local anesthesia with the finding of fibroadenoma and was discharged to complete her workup as an outpatient.

A single dose and reinforced oral cholecystogram done in June, 1970, failed to opacify the gallbladder. An intravenous cholangiogram done in November, 1970, visualized structures interpreted to represent an irregularly shaped gallbladder and proximal common bile duct. She was then scheduled for her second admission.

Her second admission was from December 17, 1970, to February 2, 1971, for elective cholecystectomy. The patient gave a 12-year history of episodes of right upper quadrant pain with subscapular radiation associated with vomiting and aggravated by ingestion of fatty foods. She had noted an increase in both frequency and severity of these symptoms over the prior three months. She denied having chills, fever, or jaundice. Physical examination was unchanged from the previous admission. Liver function studies including bilirubin, serum glutamic oxaloacetic transaminase, and serum glutamic pyruvic transaminase were within normal limits.

At initial abdominal exploration through a right subcostal incision on December 18, 1970, the patient's liver appeared grossly normal. The gallbladder grossly appeared chronically inflammed,

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but contained no stones. Microscopic examination of the removed gallbladder showed mild acute cholecystitis and cholesterolosis. After removal of the gallbladder, attempts at cholangiography were unsuccessful. A cholangiogram showed contrast medium in a large irregular space and the operating surgeon thought that contrast had extravasated outside the common bile duct. When a repeat cholangiogram showed a similar picture, formal common bile duct exploration was undertaken. Bakes' dilators could not be passed into the duodenum so duodenotomy was performed and under direct vision a 5mm diameter Bakes' dilator was passed into the duodenum through the ampulla of Vater. The duodenotomy was closed and the common bile duct was drained by a T-tube inserted through the cystic duct stump. Elective appendectomy was performed prior to placement of a penrose drain in the foramen of Winslow region and closure of the wound.

T-tube cholangiograms taken on the 11th and 21st postoperative days showed very little passage of contrast medium into the duodenum from a greatly dilated common bile duct and intrahepatic biliary tree. In the interval between these two x-ray studies the patient was treated for severe fluid and electrolyte depletion with metabolic acidosis resulting from inadequate replacement of biliary drainage. Intravenous replacement therapy was complicated by the development of left hydrothorax resulting from accidental placement of a subclavian catheter in the left pleural space. This complication was successfully managed by repeated thoracentesis. However, the patient continued to run a febrile course and a subphrenic abscess was suspected. At re-exploration on January 13, 1971, no abscess could be identified. The supraduodenal portion of the common bile duct was exposed by following the T-tube to its entrance into this structure. The common bile duct, which was dilated to almost the diameter of the small intestine, was encircled with an umbilical tape after freeing it from surrounding structures and it was transected. A biopsy specimen of common duct wall taken at the point of transection showed chronic inflammation and fibrosis. The distal common bile duct was oversewn and the dilated proximal common bile duct was anastomosed end-to-side to a Roux-en-y loop of proximal jejunum. The T-tube was left in the common bile duct and a feeding jejunostomy was constructed. The right upper quadrant was drained with a sump and several penrose drains.

The patient had a febrile postoperative course and developed a fecal fistula from the drain site in the right upper quadrant on the 10th postoperative day. A sinogram revealed a communication with the hepatic flexure of the colon through a large abscess cavity. Sump drainage, which had been discontinued on the fourth postoperative day was reinstituted. The colocutaneous fistula subsequently closed and the patient was discharged on the 25th postoperative day. Following discharge the patient was followed in the outpatient clinic where she was noted to be depressed and was having bizarre dreams about her own impending death! She expressed suicidal thoughts and was placed on Stelazine. She complained of back pain which an orthopedist thought to be related to her scoliosis. Workup for possible urinary tract infection was negative.

The patient's final admission was on March 12, 1976, when she complained of right-sided abdominal pain associated with nausea of one year's duration and afternoon chills and fever of six weeks duration. The right upper quadrant abdominal pain had become more severe in that interval and was distinctly aggravated by eating. She had noted anorexia and on occasions vomited when she had the abdominal pain. She denied the occurrence of jaundice, light stools, or dark urine. On physical examination she was markedly obese and had decreased breath sounds at the right lung base posteriorly. She was noted to have splinting of her right chest. There was exquisite right upper quadrant abdominal tenderness and the liver edge was palpable 6 cm below the right costal margin in the mid clavicular line. Pelvic examination could not be adequately performed because of an imperforated hymen and the cervix was not visualized. Rectal exam was unremarkable.

Admission laboratory studies disclosed a leukocyte count of 18,000/mm3 and a hemoglobin of 10.3 gm%. Alkaline phosphatase was elevated to 229 units and SGOT was 210 units. Chest x-ray revealed blunting of the right costophrenic sulcus thought to represent fluid accumulation. Intravenous pyelogram was within normal limits. Technetium- 99 liver scan and ultrasound liver scan showed massive filling defects compatible with dilated intrahepatic ducts or abscess. A transhepatic cholangiogram revealed patency of the choledochojejunostomy and again showed the dilated intrahepatic ducts.

The patient pursued a septic course with daily fever spikes which subsequently responded to broad spectrum antibiotic coverage. Eleven days after admission and one day following the transhepatic cholangiogram she became hypotensive, dyspneic, and developed melena. A massive right pleural effusion was noted and a chest tube was placed with removal of 250cc of bloody fluid. She was transfused and showed clinical improvement.

She then became comatose over the next 24 hours and was noted to have a serum calcium of 7.9 mEq/1. She was treated with diuretics, sodium phosphate infusion, and corticosteroids with some improvement in both the calcium level and level of consciousness. However, her respiratory status deteriorated with development of hypoxemia and respiratory acidosis superimposed upon metabolic acidosis. She was then intubated and placed on intermittent positive pressure respiration. Following this she developed increasingly severe hypercalcemia and became semi-comatose with progressive abdominal distention. On March 28 she underwent abdominal exploration through her old upper abdominal incision. Several liters of bloody fluid were evacuated and the liver was exposed. It was noted to contain multiple tumor nodules, one of which was biopsied. This reported to show metastatic poorly differentiated carcinoma compatible with a primary site in the cervix uteri or lung. The morning after surgery the patient suddenly expired. Permission for autopsy was refused by the patient's family.

Discussion

This unfortunate young lady presents an example of a rare condition: cystic dilatation of the intrahepatic bile ducts. Many standard reference works in gastroenterology contain no references to this condition and the 4th edition of Shelia Sherlock's Diseases of the Liver devotes only nine lines to the condition.[1]

This patient was the subject of a previous report in the surgical literature[2] because she was the second reported example of the association of cystic dilatation of the extrahepatic biliary duct system with intrahepatic dilatation in addition. She also presented some features of another uncommon entity—the Laurence-Biedl-Bardet-Moon syndrome. It is my intention to confine this discussion to the anomalies of the biliary ducts which this patient had because the symptoms which they caused, i.e. right upper quadrant pain, nausea, and vomiting are those of a far more common condition: choledocholithiasis. Therefore, it has been extremely uncommon for cystic dilatation of the intrahepatic ducts to be diagnosed prior to surgical exploration because the symptoms are more readily attributed to biliary tract stones.

Congenital dilatation of the intrahepatic biliary ductal system was first characterized by Caroli as a clinical entity in 1958.[3] In a later paper Caroli and Corcos credit Le Naour with reporting the first recognized case of the condition.[4] Subsequent review of the literature has disclosed a case which appears to meet the criteria for cystic dilatation of the intrahepatic bile ducts by Vachell and Stephens in 1906.[5]

At any rate following the suggestion of Martin, Corcos, and Albano[6] this anatomic and clinical entity became known as "Maladie de Caroli" in the French literature and recent papers on the subject in the American literature have used the term "Caroli's Disease." Since Caroli's publications, cases of segmental dilatation of the biliary tracts have been reported with increasing frequency. The recent collective review by Watts, Lorenzo, and Beal[7] drew upon data from a total of 84 cases which included our case as well as three of the author's own cases.

The disease is manifested by saccular or cylindrical dilatation of the intrahepatic radicals and may involve the biliary ductal system diffusely (as in our case) or be confined to one lobe or one segment. The congenital origin of the dilatation of the intrahepatic biliary system is inferred from the fact that symptoms usually begin in early childhood. In our case the symptoms of right upper quadrant pain began at age 16 which is an older age of onset than in many of the reported cases. In fact, Watts et al[7] report onset of symptoms before the age of 10 in 28 of 84 patients in their collected cases.

The entity first described by Caroli and associates was characterized by (1) congenital saccular dilatation of the intrahepatic bile ducts, (2) high incidence of stone formation and cholangitis, (3) absence of hepatic cirrhosis and portal hypertension, and (4) association with renal tubular ectasia or other forms of cystic disease of the kidney and possibly of the pancreas. In a later publication Caroli[8] recognized the existence of a second type associated with hepatic fibrosis. Most of the cases subsequently reported have been of this type.[9]

Recognition of this malformation is difficult and is seldom made before surgical exploration.

The correct diagnosis is frequently made only after repeated abdominal operations with an operative cholangiogram disclosing the typical topographic features of the disease. Occasional cases have been diagnosed preoperatively by Rose Bengal I_{131} liver scan and intravenous cholangiography.[9] The use of percutaneous transhepatic cholangiography as well as endoscopic retrograde cannulation of the common bile duct offer additional methods whereby preoperative diagnosis of this condition might be confirmed.

The most successful surgical treatment of the disease has been by internal drainage of the biliary tree. External drainage has been used, usually under dire circumstances, but the results have been uniformly poor. A number of different internal drainage procedures have been used, but we were influenced by the excellent long term results reported by Trout and Longmire[10] for Roux-en-y choledochojejunostomy in the management of congenital cystic dilatation of the common bile duct when we chose to utilize this procedure in our patient. The subsequent review and experience of Watts et al[7] support this viewpoint.

However, adequate drainage of the extrahepatic biliary ducts does not assure adequate drainage of the dilated intrahepatic ductal system in Caroli's Disease. Followup of collected series of cases suggests that the long term prognosis is poor with recurrent attacks of cholangitis occurring in many patients with internal drainage leading sometimes to sepsis and death. Watts et al[7] utilized an additional surgical procedure which attacks the problem of intrahepatic biliary stasis and hence may prove curative in selected cases with unilobar involvement-major hepatic resection. They consider resection to be the procedure of choice when the general condition of the patient is satisfactory and the cystic malformation is confined to one lobe. Because of the frequency of stasis and gallstone formation in Caroli's Disease, long term therapy with antibiotics and bile salts have been suggested as adjuvant measures following surgery.

Complications other than cholangitis have been reported. These are biliary-pleural fistula, spontaneous rupture of cystic structures, and intrahepatic abscess. The latter complication was strongly considered in our case as a cause of our patient's febrile course during her final admission. However, she manifested a complication which has been reported with increasing frequency in association with choledochal cysts—carcinoma. Lorenzo et al[12] were able to collect 13 cases in which adenocarcinoma, squamous carcinoma, or carcinoma, not otherwise specified but usually located in the biliary tree, was documented in a review of 539 cases of congenital dilatation of the biliary tree. They point out that this is a twenty-fold increase in incidence of bile duct carcinoma over that reported for the general population. Three of the 84 cases in the collected series of patients with intrahepatic dilatation reported by Watts et al[7] had documented biliary carcinoma. Although the exact site of origin of the metastatic carcinoma found in the liver of our patient will forever remain occult, it is tempting to ascribe an origin in the biliary duct system.

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Members of the Kentucky Medical Association:

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Before prescribing, please consult complete product information, a summary of which follows:

Indications: In adults, urinary tract infections complicated by pain (primarily pyelonephritis, pyelitis and cystitis) due to susceptible organisms (usually *E. coli, Klebsiella-Aerobacter, Staphylococcus aureus, Proteus mirabilis,* and, less frequently, *Proteus vulgaris*) in the absence of obstructive uropathy or foreign bodies. **Note: Carefully coordinate *in vitro* sulfonamide sensitivity tests with bacteriologic and clinical response; add aminobenzoic acid to follow-up culture media. The increasing frequency of resistant organisms limits the usefulness of antibacterials including sulfonamides.** Measure sulfonamide blood levels as variations may occur; 20 mg/100 ml should be maximum total level.

Contraindications: Children below age 12; sulfonamide hypersensitivity; pregnancy at term and during nursing period; because Azo Gantanol contains phenazopyridine hydrochloride it is contraindicated in glomerulonephritis, severe hepatitis, uremia, and pyelonephritis of pregnancy with G.I. disturbances.

Warnings: Safety during pregnancy not established. Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been reported and early clinical signs (sore throat, fever, pallor, purpura or jaundice) may indicate serious blood disorders. Frequent CBC and urinalysis with microscopic examination are recommended during sulfonamide therapy.

Precautions: Use cautiously in patients with impaired renal or hepatic function, severe allergy, bronchial asthma; in glucose-6-phosphate dehydrogenase-deficient individuals in whom dose-related hemolysis may occur. Maintain adequate fluid intake to prevent crystalluria and stone formation.

Adverse Reactions: *Blood dyscrasias* (agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia); *allergic reactions* (erythema multiforme, skin eruptions, Stevens-Johnson syndrome, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis); *G.I. reactions* (nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis); *CNS reactions* (headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia); *miscellaneous reactions* (drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon). Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

Dosage: Azo Gantanol is intended for the acute, painful phase of urinary tract infections. *Usual adult dosage:* 2 Gm (4 tabs) initially, then 1 Gm (2 tabs) B.I.D. for up to 3 days. If pain persists, causes other than infection should be sought. After relief of pain has been obtained, continued treatment with Gantanol (sulfamethoxazole) may be considered.

NOTE: Patients should be told that the orange-red dye (phenazopyridine HCl) will color the urine.

Supplied: Tablets, red, film-coated, each containing 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl—bottles of 100 and 500.

ROCHE

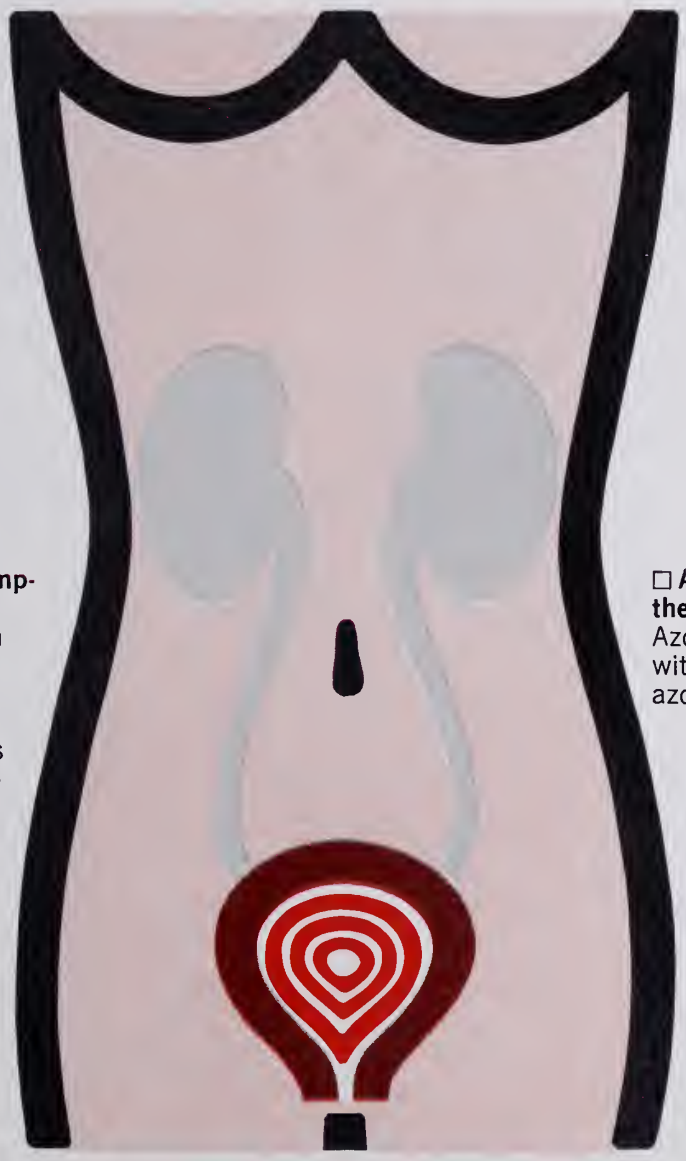
Roche Laboratories
Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

When pain complicates acute cystitis*

Azo Gantanol®

Each tablet contains 0.5 Gm sulfamethoxazole and 100 mg phenazopyridine HCl.

for the pain for the pathogens



☐ **Early relief of painful symptoms** such as burning and discomfort associated with urgency and frequency.

☐ **Effective control of susceptible pathogens** such as *E. coli, Klebsiella-Aerobacter, Staph. aureus, Proteus mirabilis* and, less frequently, *Proteus vulgaris.*

☐ **Appropriate antibacterial therapy:** up to three days with Azo Gantanol, then 11 days with Gantanol® (sulfamethoxazole).

*nonobstructed; due to susceptible organisms

ROCHE

DYAZIDE®

Trademark

Each capsule contains 50 mg. of Dyrenium® (triamterene, SK&F) and 25 mg. of hydrochlorothiazide.

MAKES SENSE

TRIAMTERENE CONSERVES POTASSIUM WHILE HYDROCHLOROTHIAZIDE LOWERS BLOOD PRESSURE

FOR LONG-TERM CONTROL OF HYPERTENSION*

Serum K^+ and BUN should be checked periodically. (See Warnings Section.)



Before prescribing, see complete prescribing information in SK&F literature or *PDR*. The following is a brief summary.

*

Warning
This fixed combination drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

***Indications:** *Edema:* That associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. *Mild to moderate hypertension:* Usefulness of the triamterene component is limited to its potassium-sparing effect.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: **Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired.** Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 capsules; in Single Unit Packages of 100 (intended for institutional use only).

SK&F Co., Carolina, P.R. 00630
Subsidiary of SmithKline Corporation

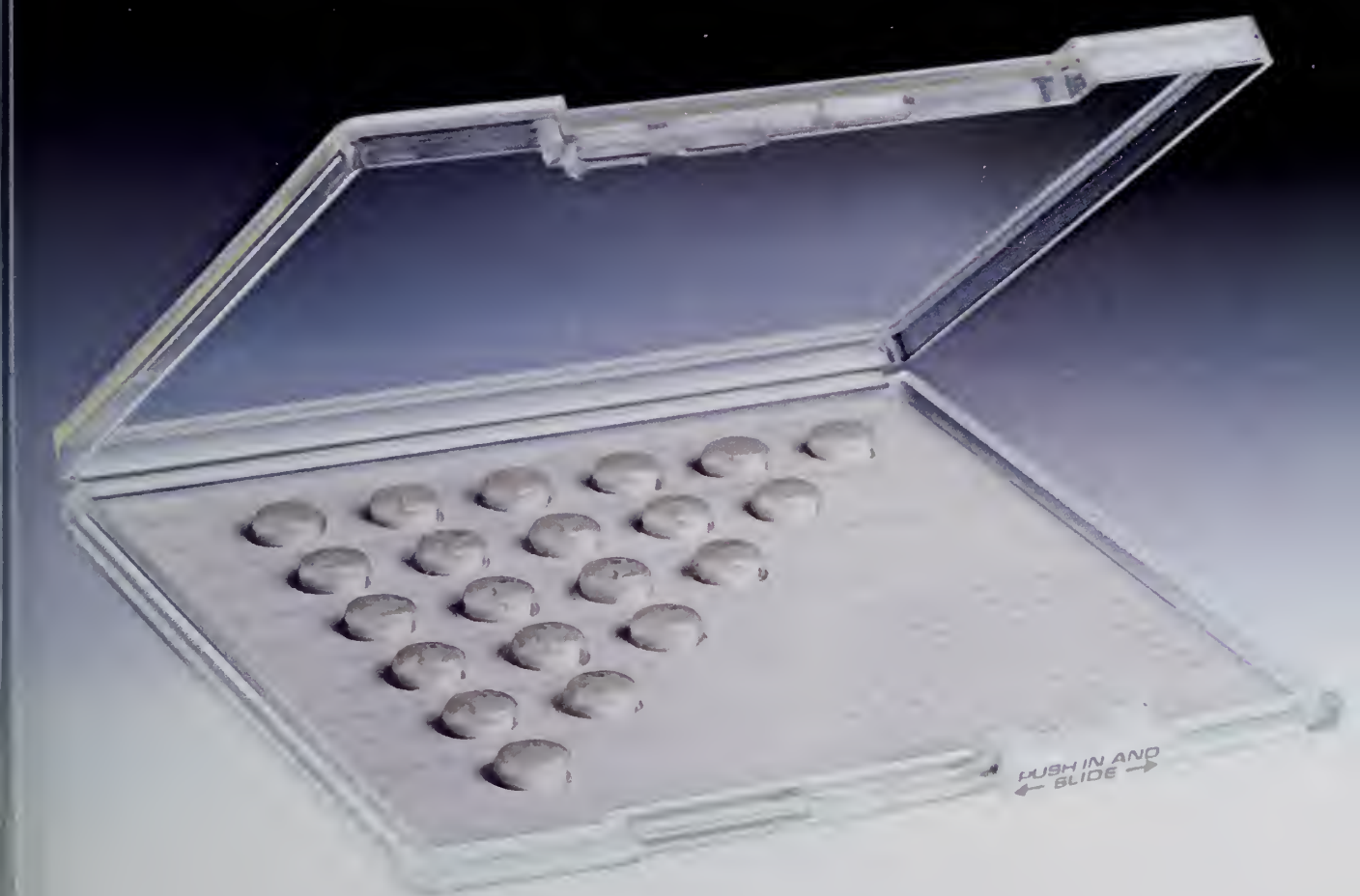
Upjohn

The Upjohn Company, Kalamazoo, Michigan 49001

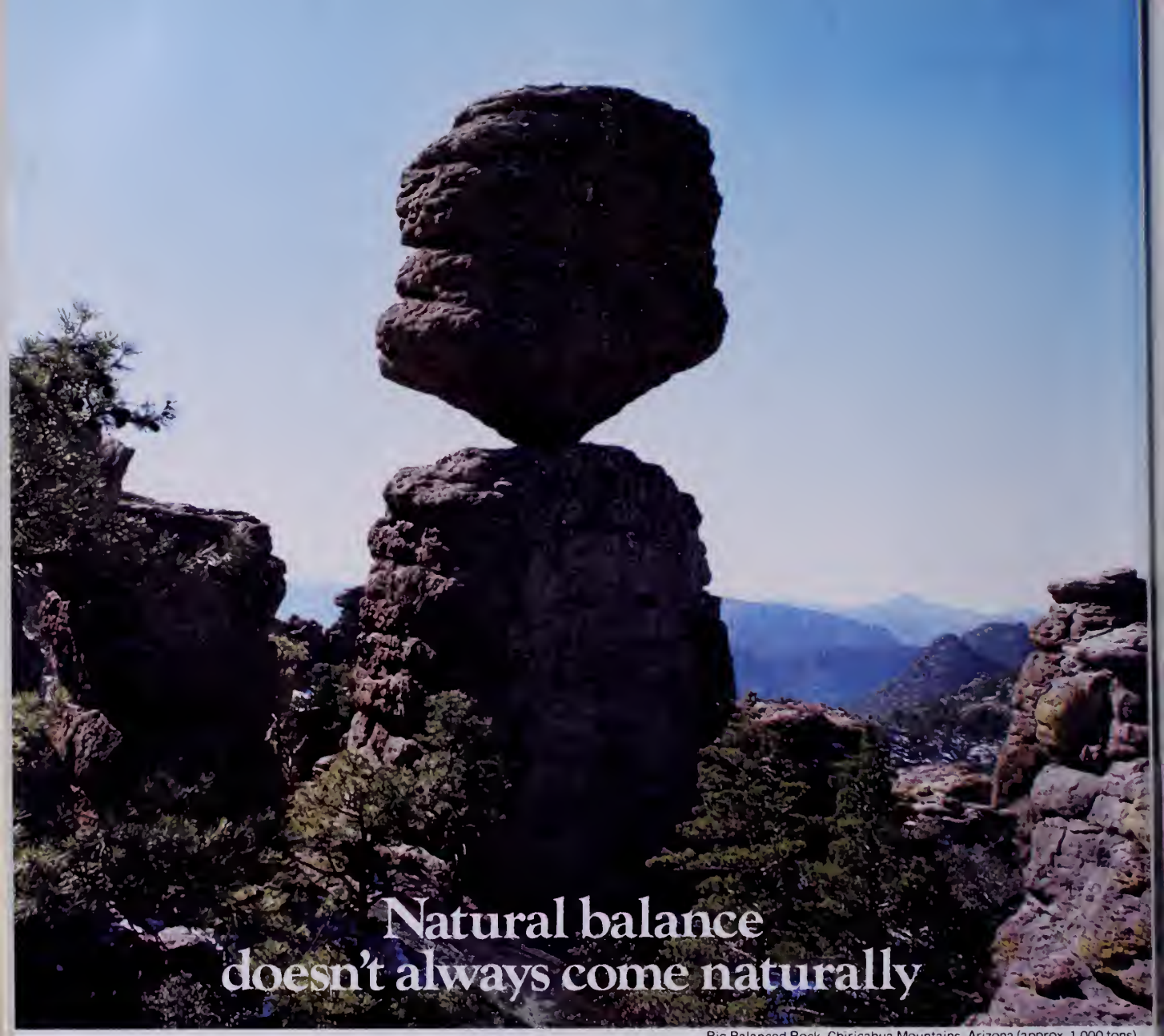
Medrol® 4 mg Dosepak*

methylprednisolone, Upjohn

The explicit printed dosage instructions that accompany each Dosepak make it easy for the patient to understand and follow the dosage regimen.



*Trademark



Big Balanced Rock, Chiricahua Mountains, Arizona (approx. 1,000 tons)

□ Found useful in the management of vertigo* associated with diseases affecting the vestibular system.
□ Can relieve nausea and vomiting often associated with vertigo.*
□ Usual adult dosage for Antivert/25 for vertigo:* one tablet t.i.d.
□ Also available as Antivert (meclizine HCl) 12.5 mg. scored tablets, for dosage convenience and flexibility.
□ Antivert/25 (meclizine HCl) 25 mg. *Chewable* Tablets for nausea, vomiting and dizziness associated with motion sickness.

BRIEF SUMMARY OF PRESCRIBING INFORMATION

*INDICATIONS. Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during p nancy or to women who may become pregnant is contraindicated in view of teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gest has produced cleft palate in the offspring. Limited studies using doses of over 100 kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft pa Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hy sensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, pati should be warned of this possibility and cautioned against driving a car or opera dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in chil have not been done; therefore, usage is not recommended in the pediatric age grou

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blu vision have been reported.

More detailed professional information available on request.

ROERIG Pfi
A division of Pfizer Pharmaceut
New York, New York 10017

Antivert®/25
(meclizine HCl) 25 mg. Tablets
for vertigo*

EDITORIAL

FOR YOUR DUES

A Proud Legislative Record . . . .

THERE are some amongst us who still are prone to ask "What do I get for my KMA dues?", or "What does KMA do for me?"

One answer to those questions might be found in the report of the Association's involvement in the 1976 Kentucky General Assembly which was mailed to each member in April. A casual review of the bills on which KMA took a position leaves no doubt that medicine's efforts were motivated not only by the interests of the profession but, more importantly, by the good citizens of the Commonwealth—our patients.

The success with which KMA supported the passage of many important and worthwhile pieces of legislation, and lobbyed against the bills which were not in the best interests of either medicine or the public, is a tribute to the efforts of the Association's leadership and staff, the Legislative Committee, the Key Men, and the many other members who contributed their time and effort.

Due to the persistence of the malpractice insurance crisis, the passage of Senate Bill 248 and Senate Bill 249 proved to be the highlight of the legislative session from medicine's point of view. Having worked closely with Governor Carroll in the development of these bills, KMA supported them and saw the inclusion of most of the points proposed by the House of Delegates in our legislative package.

Among the many important facets of Senate Bill 248, which is reprinted in its entirety on page 245 of this issue of *The Journal,* one should take particular note of the section relating to the confidentiality, or "nondiscovery," of records relating to peer review activities. Organized medicine has been criticized by the media, as well as the politicians and bureaucrats, for failure to police the profession. We may protest that we have a more sophisticated mechanism of peer review than does any other profession but do we dare claim that it functions at optimal efficiency at all times?

If we are to be honest with ourselves, we will have to agree that there are physicians who have not kept up with the advances in medicine, that there are some who, because of physical or emotional problems, should not be treating sick patients, and a few who have disavowed the Hippocratic Oath and medicine's Code of Ethics.

In our defense, on the other hand, we can cite the experience of the conscientious physician who finds himself as the defendant in a legal action just because he attempted to "police" the profession and rid it of an incompetent or unethical member.

Hopefully, the protection provided by this new law will strengthen the efforts of the utilization review and audit committees, the peer review mechanism, the Judicial Council, and even the Board of Licensure so that we can prove to our critics that we can and do police our ranks in fulfilling our commitment to provide the highest quality care to our patients.

The Professional Liability Insurance Law (S.B. 248) will not automatically resolve the liability problem in Kentucky but it is an important first step. Assuming that its constitutionality will be upheld during the inevitable test case before the Kentucky Supreme Court, it will give KMA the tools with which to work to find the ultimate solution to the crises.

HBA

. . . . A Strong Self-Policing Record

THE malpractice crisis has been utilized by the press and various groups to accelerate their attacks on the medical profession, stating that such problems would not exist if the profession made more of an effort to "police" itself. KMA's record demonstrates this criticism to be unfounded.

Few, if any, other groups have instituted so many **voluntary checks** on their members as physicians, e.g., hospital UR committees, local peer review and grievance committees, Judicial Councils at the county, state, and national levels, and the Claims and Utilization Review Committee, all of which are utilized by outside groups and respected for their capabilities.

Few other groups have as many **mandatory checks** as do physicians, e.g., the activities of the Board of Medical Licensure and participation in continuing medical education. Additional mandatory checks are administered through the Medicare and Medicaid programs, the state Licensing and Regulation Agency of Health Care Facilities and others. In addition, a special committee exists for those physicians with health problems that might affect their ability to practice medicine.

The peer review system, self-administered since 1968, is now used by all major insurance carriers in the state, including the Medicaid and Medicare programs. The prime responsibility of the review system is to assure the delivery of quality medical care at a reasonable cost and, although peer review committees have no legal authority, the system has nevertheless proven quite capable. A total of 433 insurance claims were reviewed during 1975 by the local and state peer review committees. Appropriate actions were taken as a result of their activities to include reduction of fees charged by physicians, partial disallowance of hospital stays, disallowance of complete fees charged and hospital stays, recommendations for remedial education by attending physicians, recommendations for cessation of practice, and referral of matters to the Judicial Council and Board of Medical Licensure.

The Judicial Council and county society grievance committees determine proper medical ethics and conduct. During 1975 the Judicial Council considered 39 separate situations concerned with physicians and their practices. The Council brought to proper conclusion problems involving such matters as abortions, patient grievances, physician ownership of pharmacies, physician solicitation, narcotics prescribing abuses, and others.

The Board of Medical Licensure, an agency of state government, is the licensing and disciplining board for physicians. In addition, the Board has investigative and legal authority, and during 1975 took action on 15 specific complaints referred to them. Actions taken included the issuance of "warnings" and the probation, suspension, and revocation of licenses. Although formal action against physicians is time-consuming and costly, the Board, which serves without compensation other than a small per diem and expense reimbursement, has vigorously pursued its responsibilities.

The Continuing Medical Education Program, approved by the KMA House of Delegates, will require continuing participation in educational activities for re-registration of medical licenses. Numerous continuing educational opportunities are available in Kentucky through the AMA, KMA, state and national specialty groups, the Louisville Area CME Consortium, and a wide range of postgraduate courses from the University of Louisville and University of Kentucky medical schools.

The mechanisms within KMA for "policing" are many, are on-going, are ever-increasing, and are all on a voluntary, self-initiated basis. A "pat on the back" is not the purpose of this message. The medical profession has never favored the concept of advertising or promoting the safeguards we implement on their behalf to the public. Some think we should, as was voiced by a consumer group that recently expressed surprise at all of KMA's continuing education endeavors, peer review, and related activities. Perhaps, if every member of KMA is armed with vital statistics and necessary facts regarding "self-policing", unfounded criticism can be refuted.

SPECIAL ARTICLES

GENERAL ASSEMBLY

COMMONWEALTH OF KENTUCKY

SENATE BILL NO. 248

At the request of the KMA Board of Trustees, Senate Bill No. 248 is being reprinted here in the form in which it was received from the Legislative Research Commission to include amendments made to the Bill.

AN ACT *RELATING TO HEALTH CARE MALPRACTICE INSURANCE AND CLAIMS.*

WHEREAS, there currently exists throughout Kentucky a crisis concerning the availability and cost of health care malpractice liability insurance; and

WHEREAS, the health care malpractice liability insurance crisis is making it increasingly difficult to bring young physicians, new hospitals, and other health care providers into Kentucky; and is making it increasingly difficult to keep physicians, hospitals, and other health care providers presently in Kentucky; and

WHEREAS, the increasing cost of health care malpractice insurance is resulting in a continuing increase in the cost of health care delivery, which cost is being borne by those Kentuckians who are ill and can least afford it; and

WHEREAS, the lack of availability of health care malpractice insurance is threatening the entire health care delivery system in Kentucky and is thereby adversely affecting the present and future health of the citizens of this Commonwealth; and

WHEREAS, the ability of the University of Kentucky and the University of Louisville to continue to provide medical education is threatened, along with the continuing ability of public hospitals in Kentucky to provide proper medical care to the indigent, and

WHEREAS, the General Assembly recognizes that the cost and lack of availability of health care malpractice insurance is affecting the health care of the people of Kentucky, and the providing of state assistance through a Patients' Compensation Fund and the providing of loans to that Fund, if necessary, is for a public purpose and within the province of the Commonwealth; and

WHEREAS, the costs of health care and health care malpractice insurance are directly affected by the amounts of settlements of claims for malpractice and the probability of using tax revenues to effect loans to the Patients' Compensation Fund is increased through such settlements, the Commissioner of Insurance should have the right and authority to approve or disapprove proposed settlements or other compromises involving the patients compensation fund in the interests of the taxpayers of the Commonwealth; and

WHEREAS, unless legislative action to alleviate this crisis is taken, the entire health care system in Kentucky will be in jeopardy and the quality of health care will suffer drastically;

NOW, THEREFORE,

Be it enacted by the General Assembly of the Commonwealth of Kentucky:

SECTION 1. SUBTITLE 40 OF KRS CHAPTER 304 IS ESTABLISHED AND A NEW SECTION THEREOF IS CREATED TO READ AS FOLLOWS:

(1) It is the purpose of this Act to promote the health and general welfare of the inhabitants of the Commonwealth through the adoption of reforms in health care malpractice claims, and by the establishment of the Kentucky patients' compensation fund which shall exist and operate for the public purpose of increasing the availability and lowering the cost of health care malpractice insurance, and assuring that health care malpractice judgments or settlements will be satisfied. Such purposes are hereby declared to be public purposes for which public funds may be expended.

SECTION 2. A NEW SECTION OF TITLE 40 OF KRS CHAPTER 304 IS CREATED TO READ AS FOLLOWS:

As used in this Act, the following words and terms shall be defined as follows:

(1) "Health care provider" means any physician, osteopath, dentist, podiatrist, nurse or nurse's assistant, certified registered nurse anesthetist, physical or occupational therapist, or psychologist, licensed to practice health care in this state; any hospital, medical clinic, medical foundation, health maintenance organization, extended care facility, intermediate care facility, nursing home, emergency treatment center, out-patient medical or surgical center, Frontier Nursing Service, or any other facility or service licensed under any act of this state to provide health care within this state; or any

officer, director, employer agent thereof; and any corporation, partnership or sole proprietorship which directly provides medical services to its employes;

(2) "Commissioner" means the commissioner of insurance;

(3) "Patient" means a natural person who receives health care from a licensed health care provider under a contract, express or implied;

(4) "Claimant" means the patient or spouse, parent, guardian, trustee, or other authorized agent of the patient;

(5) "Tort" means any legal wrong, breach of duty, or negligent or unlawful act or omission proximately causing injury or damage to another;

(6) "Malpractice" means any tort or breach of contract based on health care or professional services rendered, or which should have been rendered, by a health care provider to the patient;

(7) "Health care" means any act, or treatment performed or furnished, or which should have been performed or furnished, by any health care provider to a patient during that patient's care, treatment, or confinement for a physical or mental condition;

(8) "Fund" means the Kentucky patients' compensation fund;

(9) "Malpractice insurer" means any insurance authority or any insurance company properly engaged in the practice of writing malpractice liability insurance under authority of the commissioner of insurance.

SECTION 3. A NEW SECTION OF TITLE 40 OF KRS CHAPTER 304 IS CREATED TO READ AS FOLLOWS:

In any action for damages for malpractice, the ad damnum clause or prayer for damages in any pleading shall not recite any sum as alleged damages other than an allegation that damages are in excess of any minimum dollar amount necessary to establish the jurisdiction of the court; provided, however, that all parties shall have the right to advise the trier of fact as to what amounts are fair and reasonable as shown by the evidence.

SECTION 4. A NEW SECTION OF TITLE 40 OF KRS CHAPTER 304 IS CREATED TO READ AS FOLLOWS:

(1) In any malpractice action against any health care provider, no payment made or offered by or on behalf of the health care provider to the claimant to meet the reasonable expenses of health care, custodial care, loss of earnings, rehabilitation care, or other essential goods or services, shall constitute or be evidence of an admission of liability on the part of such health care provider, and no such payment or offer shall be admissible in evidence in any such action, except after a verdict for the purpose of offsetting any damages awarded. The court shall reduce the amount of any judgment for damages awarded in such malpractice action by the amount of any advance payment made by any defendant health care provider or malpractice insurer on behalf of such defendant health care provider to the claimant.

(2) In any malpractice action where there is more than one (1) defendant health care provider, and in the event an advance payment made by or on behalf of one (1) or more of said defendants exceeds the respective liability of said defendant making it, the court shall order any adjustment necessary to equate with its percentage liability the amount which said defendant is obligated to pay, exclusive of costs.

(3) In no case shall an advance payment in excess of any award of damages be repayable by the claimant.

SECTION 5. A NEW SECTION OF TITLE 40 OF KRS CHAPTER 304 IS CREATED TO READ AS FOLLOWS:

In any malpractice action in which more than one health care provider is named as a defendant concerning a single injury, the jury shall be instructed that it may apportion damages in different percentages against the defendants or may return a verdict of joint and several liability against two or more defendants.

SECTION 6. A NEW SECTION OF TITLE 40 OF KRS CHAPTER 304 IS CREATED TO READ AS FOLLOWS:

No malpractice liability shall be imposed upon any health care provider on the basis of an alleged breach of any guaranty, warranty, contract or assurance of results to be obtained from any procedure undertaken in the course of providing health care, unless such guaranty, warranty, contract or assurance is in writing and signed by the provider.

SECTION 7. A NEW SECTION OF TITLE 40 OF KRS CHAPTER 304 IS CREATED TO READ AS FOLLOWS:

(1) All malpractice claims settled or adjudicated to final judgment against a health care provider shall be reported to the commissioner of insurance by the malpractice insurer of the health care provider or the health care provider if self-insured, within sixty (60) days following final settlement or disposition of the claim. The report to the commissioner shall recit the following:

(a) name and address of health care provider involved;

(b) name and address of claimant;

(c) nature of the claim;

(d) damages asserted and alleged injury; and

(e) the amount of any settlement or judgment.

(2) The commissioner of insurance shall forward the name of every health care provider against whom a settlement is made or judgment is rendered to the appropriate licensure board or regulatory agency for review of the fitness of the health care provider to practice his profession.

(3) (a) At any time before a jury is empanelled or before a trial is commenced by a court without a jury, no settlement or other compromise of any claim for malpractice shall be effective between a claimant and the fund unless the proposed settlement or other compromise shall have been approved by the commissioner.

(b) The commissioner shall prescribe by rule the procedure for submission of settlements or other compromises involving the fund.

(c) If the commissioner shall disapprove a proposed settlement or other compromise involving the fund, the claimant may thereafter pursue his interests in a court of appropriate jurisidiction and the action of the commissioner shall not be admissible upon any trial of the action.

(d) Notwithstanding the provisions of KRS 413.140, when an offer to compromise or settle has been filed

with the commissioner the statute of limitations made and provided for the commencement of an action for malpractice shall not bar any such action until ninety (90) days after notice to the parties of the commissioner's disapproval of any proposed settlement or other compromise.

SECTION 8. A NEW SECTION OF TITLE 40 OF KRS CHAPTER 304 IS CREATED TO READ AS FOLLOWS:

In any action brought for treating, examining, or operating on a claimant wherein the claimant's informed consent is an element, the claimant's informed consent shall be deemed to have been given where:

(1) the action of the health care provider in obtaining the consent of the patient or another person authorized to give consent for the patient was in accordance with the accepted standard of medical or dental practice among members of the profession with similar training and experience; and

(2) a reasonable individual, from the information provided by the health care provider under the circumstances, would have a general understanding of the procedure and medically or dentally acceptable alternative procedures or treatments and substantial risks and hazards inherent in the proposed treatment or procedures which are recognized among other health care providers who perform similar treatments or procedures;

(3) in an emergency situation where consent of the patient cannot reasonably be obtained before providing health care services, there is no requirement that a health care provider obtain a previous consent.

Section 9. KRS 311.377 is amended to read as follows:

(1) No person who is a member, participant in or employe of, or who furnishes professional counsel or services to any committee, board, commission, professional standards review organization, or other entity which is duly constituted by any licensed hospital, medical society or association affiliated with the American Medical Association, American Podiatry Association, American Dental Association, American Osteopathic Association or the American Hospital Association, or a medical care foundation affiliated with such a medical society or association, or governmental or quasi-governmental agency for the purpose of reviewing and evaluating the health care acts of other health care personnel; and no appointed member of the state health planning council; and no member of a recognized health systems agency shall be required to respond in damages for any action taken by him in good faith as a member, participant, employe, or provider of professional counsel or services to such committee, board, commission, professional standards review organization, or other entity.

(2) The proceedings, records, opinions, conclusions and recommendations of any committee, board, commission, professional standards review organization, or other entity, as referred to in subsection (1) of this section, shall not be subject to discovery, subpoena, or introduction into evidence, in any civil action in any court or in any administrative proceeding before any board, body, or committee, whether federal, state, county, or city.

(3) Nothing in subsection (2) of this section shall be construed to restrict or limit the right to discover or use in any civil action or other administrative proceeding any evidence, document or record which is subject to discovery independently of the proceedings of the committee, board, commission, professional standards review organization or other entity to which subsection (1) of this section refers.

(4) No person who presents or offers evidence in proceedings described in subsection (2) of this section or who is a member of any committee, board, commission, professional standards review organization before which such evidence is presented or offered may refuse to testify in discovery or upon a trial of any civil action as to any evidence, document or record described in subsection (3) of this section or as to any information within his own knowledge except as provided in subsection (5) of this section.

(5) No person shall be permitted or compelled to testify concerning his testimony or the testimony of others except that of a defendant given in any proceeding referred to in subsection (2) of this section, or as to any of his opinions formed as a result of such proceeding.

(6) In any action in which the denial of staff privileges by any health care entity shall be in issue, agents, employees or other representatives of a health care entity may with the consent of such health care entity testify concerning any evidence presented in proceedings related to the entity's denial of such staff privileges.

(7) Nothing in this section shall be construed to restrict or prevent the presentation of testimony, records, findings, recommendations, evaluations, opinions or other actions of any committee, board, commission, professional standards review organization, or other entity described in subsection (1) of this section, in any statutory or administrative proceeding related to the functions or duties of any committee, board, commission, professional standards review organization, or other entity.

SECTION 10. A NEW SECTION OF TITLE 40 OF KRS CHAPTER 304 IS CREATED TO READ AS FOLLOWS:

(1) There is hereby created within the department of insurance a state agency to be known as the Kentucky patients' compensation fund. The funds of the fund shall be maintained separate and apart from the general fund in a trust and agency account, and that portion thereof certified by the commissioner of insurance to the treasurer as being in excess of the immediate needs of the fund shall be invested and reinvested by the treasurer from time to time for the benefit of the fund. The management of the fund shall be vested with the commissioner, and the commissioner shall promulgate rules and regulations to implement the provisions of this section.

(2) Every physician licensed and practicing in Kentucky and every hospital located in Kentucky shall be members of the fund; and any other health care provider as defined in section 2 of this Act may be a member of the fund with the prior written approval of the commissioner. The commissioner may, upon application, grant an exception to participation in the fund by any physician who has a limited practice, or is in such special circumstances that he should not reasonably be required to participate in the fund.

(3) Each member of the fund shall acquire and maintain in force professional liability insurance of not less than one hundred thousand dollars ($100,000) per occurrence and three hundred thousand dollars ($300,000) in the aggregate for all claims occurring in any one (1) policy year, or, as an alternative, qualify as a self-insurer upon making proper application and being approved by the commissioner of insurance.

(4) Self-insurance subject to approval by the commissioner of insurance is effected by filing with the commissioner in satisfactory form:

(a) A continued undertaking by the health care provider or such other appropriate entity to pay any tort liabilities arising from malpractice claims to the first one hundred thousand dollars ($100,000) per incident and to three hundred thousand dollars ($300,000) in the aggregate for all claims occurring in any one year; and

(b) Evidence that appropriate provision exists for prompt and efficient administration of all claims; and

(c) Evidence that reliable financial arrangements, deposits or commitments exist providing coverage substantially equivalent to that afforded by a policy of insurance required in subsection (3) of this section for the payment of malpractice claims.

(5) Each member of the fund shall pay an annual assessment:

(a) The amount of assessment shall be set by the commissioner and shall not exceed per annum ten percent (10%) of the insurance premium required by subsection (3) of this section for health care providers other than hospitals, and for hospitals shall not exceed fifty dollars ($50) per bed.

(b) Every insurer affording coverage to member health care providers other than hospitals required by subsection (3) of this section shall on all policies written or renewed collect a surcharge of ten percent (10%) of the total premium or such lesser amount as determined by the commissioner, and pay the same over to the fund within thirty (30) days of collection. Such surcharge shall be exempt from premium taxes, surplus lines tax, city and county taxes, and from agents' commissions and all other administrative charges by the insurer.

(c) Prior to June 1, 1976, the commissioner of insurance shall assess each member health care provider for the pro rata part of his assessment from July 1, 1976, until the current policy in force expires. The commissioner shall determine by formula a premium that would have been charged to self-insurers and they purchased the insurance required in subsection (3) of this section and assess such self-insurers in accordance therewith; provided, however, that the premium so determined shall not be less than the average premium for all such health care providers of that classification.

(6) If the commissioner determines that a health care provider is unable to acquire the professional liability insurance required by subsection (3) of this section at a premium no greater than three hundred percent (300%) of the average premium then charged for risks of the same class and experience, or at all, and such health care provider is unable or unwilling to qualify as a self-insurer, then the commissioner may provide to such health care provider coverage within the fund for the first one hundred thousand dollars ($100,000) per occurrence and three hundred thousand dollars ($300,000) in the aggregate for all claims occurring in any one (1) policy year, and the commissioner may designate an insurance carrier to act as the servicing carrier for such health care provider and charge as a premium therefor an amount to be determined by the commissioner which shall not exceed three hundred percent (300%) of the average premium then charged for risks of the same class and experience. The number of health care providers which the commissioner may accommodate under this section shall not exceed ten (10) in any one (1) year.

(7) The purposes for which funds from the Kentucky patients' compensation fund may be expended are:

(a) The payment of a judgment against a health care provider who is a member of the fund for any judgment in a malpractice action against such a health care provider in excess of the insurance coverage required by subsection (3) of this section.

(b) A payment in settlement of a malpractice claim against a health care provider in excess of the insurance coverage required pursuant to subsection (3) of this section, provided the settlement has been approved pursuant to subsection (3) of Section 7 of this Act.

(c) All costs incurred by a servicing carrier including payment of judgment and settlements of cases and defense of cases in cases involving coverage allowed by subsection (5) of this section.

(d) Provided, however, that no funds shall be expended in payment or settlement of claims which are not covered by the basic insurance required by subsection (3) of this section; nor shall any funds be expended in payment of claims against a self-insured which would not have been covered had the self-insured acquired professional liability insurance required by subsection (3) of this section.

(8) Claim procedures with respect to claims made against the fund shall include, but not be limited to, the following:

(a) It shall be the responsibility of the insurer or self-insurer providing insurance or self-insurance for a health care provider who is also covered by the fund to provide an adequate defense on any claim filed that potentially affects the fund with respect to such insurance contract or self-insurance contract. The insurer shall act in a fiduciary relationship with respect to any claim affecting the fund. In any judgment affecting the fund, the commissioner may require the defendant health care provider or defendant health care providers to appeal the verdict; provided, however, that the fund shall bear the cost of such appeal when required by the commissioner.

(b) A claimant who has recovered a final judgment or an approved settlement against a health care provider who is covered by the fund shall file a claim with the fund to recover that portion of such judgment or settlement which is in excess of one hundred thousand dollars ($100,000). In the event the fund incurs liability exceeding one million dollars ($1,000,000) to any person under a single occurrence, the fund shall pay not more than one million dollars ($1,000,000) per year until the claim has been paid in full.

(c) Claims filed against the fund shall be paid in the

order received within ninety (90) days after filing, unless appealed by the fund. If the fund does not have sufficient money to pay all of the claims, claims received after the funds are exhausted shall be paid out of the general fund of the Commonwealth upon certification of the obligation by the commissioner of insurance to the commissioner of the executive department for finance and administration. Any such funds drawn from the general fund shall be repaid with interest at the legal rate by the Kentucky patients' compensation fund at the earliest practical time as determined by the commissioner of insurance.

(9) All carriers providing professional liability insurance as described in subsection (3) of this section shall notify the commissioner of insurance sixty (60) days prior to the cancellation or non-renewal of insurance for any physician or hospital. The commissioner shall immediately notify the state licensing authority if any physician or hospital fails to meet the requirements of subsection (3) of this section or fails to pay an assessment within thirty (30) days of the time assessment is made. The state licensing authority shall immediately hold a hearing for the physicians or hospital to show cause why the license of the physician or hospital shall not be suspended.

SECTION 11. A NEW SECTION OF TITLE 40 OF KRS CHAPTER 304 IS CREATED TO READ AS FOLLOWS:

This Act shall become effective July 1, 1976, and shall apply only to malpractice occurring after the effective date.

Kentucky Mental Health Hospitalization Act, 1976

WILLIAM D. WEITZEL, M.D.,* AND DENNIS R. BRIGHTWELL, M.D.*

In March of this year, a new state law relating to civil commitment of the mentally ill was enacted by the Legislature and signed by the Governor. It will become effective June 18, 1976. This legislation is an attempt to incorporate evolving changes in mental health law into one uniform and consistent approach for dealing with the difficult problem of involuntary hospitalization for mental illness. This new law incorporates significant changes.

The concept of "immediate danger" has been broadened to include not only the risk of substantial physical harm or immediate threat of same to self or others but also now includes actions which would lead to the deprivation of self or others of the basic means of survival including reasonable shelter, food, and clothing. This more inclusive definition will allow us to hospitalize, among others, severely disturbed manic patients or withdrawn, incapacitated, depressed patients.

A person may now be held involuntarily in a hospital for up to 72 hours excluding weekends and holidays if two licensed physicians or a licensed physician and a "qualified mental health professional" certify that an individual needs immediate care and treatment based on four legal conditions. A "qualified mental health professional" includes a licensed psychologist, a licensed registered nurse with a Master's degree in Psychiatric Nursing and two years of clinical experience with mentally ill persons, a certified licensed social worker, and a Master's degree level psychologist who has a certificate of qualification from the Kentucky Board of Examiners of Psychologists and has two years of clinical experience with mentally ill persons. The involvement of a non-physician in this procedure has precedent in legal proceedings used for hospitalization of mentally retarded persons and is of practical consideration in the less populated areas of our state. The use of non-physicians in commitment petitions for mentally ill persons is limited only to this initial 72-hour involuntary hospitalization.

The four legal criteria used for civil commitment involve the professional opinion that: 1) the individual is a mentally ill person; 2) the person is in immediate danger, as defined above, as a consequence of the mental illness; 3) the individual can reasonably be expected to benefit from hospitalization; and 4) hospitalization will

*The authors are Assistant Professors of Psychiatry at the University of Kentucky College of Medicine and members of the Ad Hoc Committee for Civil Commitment of the Kentucky Psychiatric Association.

be the least restrictive alternative mode of treatment. This fourth condition implies that only people who require hospitalization for effective treatment can be committed. The examining physician must conclude that a less confining and restrictive setting than a hospital would not provide acceptable treatment. This 72-hour involuntary hospitalization can be brought about after a voluntary patient requests in writing his discharge or can be instituted at first contact with a physician, e.g., in a hospital emergency room. If more than three days elapse after the examination for certification of need for hospitalization is made, an individual can not be hospitalized against his will under this law.

If a patient is involuntarily hospitalized for 72 hours and during that time agrees to become a voluntary patient, there is no need to proceed further. However, if a mentally ill patient remains an immediate danger because of mental illness and can benefit from hospitalization and the hospitalization is the least restrictive mode of treatment, then a formal petition for a 60-day involuntary hospitalization signed by two licensed physicians should be made within the allotted 72 hours. The document must be sworn to before a notary public or the clerk or judge of the court. A court hearing to determine this question will be held within 10 or 21 days of petition depending on which section of the new law is cited. During the interim between the filing of the formal petition and the court hearing, the patient may be retained in the hospital until a court decision is rendered. However, if a proper petition for a 60-day hospitalization is not filed within the 72 hours excluding weekends and holidays, the patient must be released. If the court hearing is not convened within either 10 or 21 days as specified under the various sections, the patient must be released.

When the civil hearing is held, the patient has the right to be represented by an attorney and has the right to testify and to present witnesses on his behalf and to cross-examine witnesses against him. The court hearing for the petition for the 60-day involuntary hospitalization may be held informally in court chambers, at a hospital, or at another suitable place. These arrangements can be worked out cooperatively by the judge, attorneys, and the physicians. The patient's presence at the hearing may be waived by the patient. In addition, if the patient's behavior is considered to be seriously disruptive, the court may waive his presence. In many jurisdictions in our state, the physicians who certify the need for an involuntary hospitalization should expect to be present at the hearing and even to be subpoenaed to be present. This is not written into law but seems to be evolving legal practice with public defenders. Written depositions do not seem to be sufficient in most cases.

The indeterminate hospitalization that we have been using prior to this new law no longer exists.

After a patient has been hospitalized for a period of 30 days and it is deemed that a much longer hospitalization will be necessary, a petition for a 360-day involuntary hospitalization may be filed. The proceedings to bring this about are the same as for the 60-day hospitalization in terms of physician participation. Hospitalizations for a period of time to exceed 360 days require a new hearing before a jury and a new court order.

A section of this new law directs the physician-examiner shall be entitled to a "reasonable fee" to be paid by the county in which the petition is filed. Apparently these fees will be negotiated on a county-by-county basis by the physicians and courts involved. The amount to be paid is not specified in the law.

New patients who are admitted under involuntary commitment must be examinined by an authorized physician within 36 hours and a report entered into the medical record within 48 hours after admission. Staff physicians of a hospital are authorized to discharge an involuntarily hospitalized patient when the physician concludes one of the following: 1) that the patient is no longer mentally ill; 2) that the individual no longer presents an immediate danger or an immediate threat of danger to self or others; 3) when he believes that the patient can no longer reasonably benefit from treatment in a hospital.

The Secretary of the Department for Human Resources will adopt rules and regulations under this new law which impact on many aspects of patients' civil rights. Some of the issues involved include the patient's right to be adequately informed about his/her individual treatment program and the right of a patient under certain conditions to refuse certain treatments, e.g., electroshock treatment. The proper use of seclusion rooms and restrictions on the use of mechanical restraints will be defined. Early drafts of this law included specific details about the conditions under which some treatment procedures would be allowed. Legal precedent for these restrictions exists already in Alabama and California law. The compromise decision arrived at specifies that rules

about the use of some treatment techniques will exist as hospital regulations rather than legal statute.

Malpractice protection is written into the law. When participating professionals render professional opinions or carry out duties provided for in this act, they remain free of personal liability for such actions provided that the actions were performed in good faith, involved their official duties, and were carried out in a manner consistent with acceptable professional practices.

Involuntary hospitalization of drug dependent persons, drug addicts, or persons under the influence of drugs, as defined in KRS 222.011, is authorized to take place in the same manner as described for those who are mentally ill.

It is specifically stated that mentally ill patients who are hospitalized either voluntarily or involuntarily continue to exercise all civil rights. These civil rights include ability to dispose of property, make purchases, enter into other contracts, and vote. An individual must be adjudicated incompetent by a court and not have been restored to legal capacity before he can be treated as a legally incompetent person. In other words, a patient retains all of his civil rights and is assumed to be competent unless a court formally decides otherwise. It follows that even an involuntarily hospitalized patient has the presumed competency and legal right to refuse specific treatments unless a court has determined otherwise.

It is important to note that a committed patient is not an incompetent person. Our patients are now presumed to be partners in decision making about their individual treatment plans. We may not diagnose, prescribe, and implement without regard to our committed patient's informed consent.

There are many other procedural aspects of this law. We have attempted to highlight only those that pertain to physicians. The law evolved from consultation between the Department for Human Resources, Bureau for Health Services personnel, and many interested professionals outside of state government. The authors believe that this is a good law which will allow us to help more effectively that relatively small group of mentally ill individuals who need protection from themselves or others and who will benefit from expeditiously rendered medical treatment. Cooperation between law and medicine in this task is both humane and prudent.

Memorandum to Practicing Physicians

The National Institute for Occupational Safety and Health (NIOSH) has recently informed the Kentucky Department of Labor of a possible problem associated with the use of EDTA and/or penicillamine to lower blood lead levels in workers in the lead industry. Preliminary results from a study conducted by the Mount Sinai School of Medicine in New York indicate that neurologic and metabolic impairment to workers continues to occur despite lowering blood lead levels following chelation therapy.

There are case reports of workers exposed to lead who have been given chelating agents and now have chronic renal disease. It is strongly suspected that both lead and the drug were factors in the disease process.

To obtain more information concerning this matter, NIOSH has requested the cooperation of practicing physicians. They are interested in obtaining information concerning the development of either chronic renal disease, premature aging, or symptomatic lead poisoning among lead exposed workers. They are also interested in any information you might have concerning the prophylactic use of chelating agents to lower blood lead levels. NIOSH has also requested information concerning the children of exposed workers. They are interested in increased blood lead levels, hematologic difficulties or neurological symptoms in these children. In addition, any reports of congenital abnormalities, spontaneous abortions or sterility in lead workers or their families are requested.

If you have any information concerning any of these matters, we would appreciate your contacting The Kentucky Department of Labor. Phone number is 502/564-7677.

ORGANIZATION SECTION

Outstanding Scientific Program, Speakers, Will Highlight 1976 KMA Annual Meeting, September 28-30

An outstanding scientific program will highlight the 1976 KMA Annual Meeting to be held September 28-30 at the Ramada Inn/Bluegrass Convention Center in Louisville. Many prominent guest speakers from Kentucky and throughout the nation are scheduled to participate in this year's annual session, according to David A. Hull, M.D., Lexington, KMA President.



Doctor Heimlich



Doctor Durant

Under the chairmanship of Richard F. Hench, M.D., Lexington, the KMA Scientific Program Committee has designed the program so that physicians in every medical specialty will be represented. A wide range of medical subjects, to include emergency medicine, breast problems, and antibiotics, will be discussed by guests of the Association, specialty group speakers, and local physicians during the three-day session.

Speaking on the opening morning session on Tuesday, September 28, will be Henry J. Heimlich, M.D., Cincinnati. Doctor Heimlich is Director of Surgery at the Jewish Hospital in Cincinnati and is the originator of the Heimlich Maneuver to save choking victims. An Associate Clinical Professor of Surgery at the University of Cincinnati College of Medicine, he is an authority on the treatment of diseases of the esophagus and devised the Heimlich Operation for replacement of the esophagus (reversed gastric tube esophagoplasty).

John R. Durant, M.D., Birmingham, will speak on Wednesday morning, September 29, on "Adjuvant Chemotherapy for Breast Cancer." Presently he is Professor of Medicine and Director of the Cancer Research and Training Center at the University of Alabama in Birmingham School of Medicine. Doctor Durant serves on the Executive Committee of the American Red Cross and on the editorial board of *Oncology News.*

Meetings of 17 specialty groups, two meetings of the KMA House of Delegates, the President's Luncheon, a wide variety of technical and scientific exhibits, and the Annual Convention of the Auxiliary to KMA are other important features of the upcoming meeting.

Further details on other speakers and highlights of the 1976 KMA Annual Meeting will be carried in future issues of *The Journal.*

Ky. Surgeons To Meet May 28 and 29

The Annual Spring Meeting of the Kentucky Surgical Society will be held May 28 and 29 at the French Lick Sheraton Hotel in French Lick, Indiana.

A. Hamblin Letton, M.D., Atlanta, will be the featured speaker for the program. Secretary and Director of the Southeastern Surgical Congress, Doctor Letton will speak on "Experience and Problems in Breast Screening" and "The Treatment of Minimal Breast Cancer."

In addition, 14 clinical papers will be presented by Society members or sponsored guests. Approximately 200 members and guests are expected to attend the two-day meeting.

Plans for Scientific Exhibits Should Be Made Now

Richard A. Kielar, M.D., Lexington, Chairman of the KMA Scientific Exhibits Committee, urges all physicians interested in presenting scientific exhibits at the 1976 Annual Meeting to make their plans soon.

Application for space should be received by July 1, 1976 at the KMA Headquarters Office. Scientific exhibits are welcomed and supported as a facet of continuing postgraduate education. The Kentucky Academy of Family Physicians allows one credit hour for each hour of participation and presentation of scientific exhibits up to 15 hours. Up to ten hours of Category 4 credit is allowed for the AMA Physicians Recognition Award.

An application blank was printed in the April, 1976, issue of *The Journal* on page 208. Further applications may be obtained from the KMA Headquarters Office, Scientific Exhibits, 3532 Ephraim McDowell Drive, Louisville 40205.

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1976 Emergency Care Seminar Granted CME Credit

The Sixth Annual Emergency Health Care Seminar set for June 2 and 3, at Executive West in Louisville, will offer Kentucky physicians, dentists, nurses, and technicians an outstanding continuing medical education vehicle.



Doctor Lucas

Credit can be obtained from the American Medical Association (hour per hour basis toward the Physician's Recognition Award); the American Academy of Family Physicians (10 hours); the Emergency Medical Technicians (15 points); and the Licensed Practical Nurses (9½ achievement points).

Program features include lectures, demonstrations, workshops, and special interest meetings on such topics as orthopaedics, drug reactions, and heart attacks.

Luncheon speakers for the two-day session are Marshall B. Segal, M.D., J.D., from the University of Chicago Hospital and Clinics, and Charles E. Lucas, M.D., Professor of Surgery, Wayne State University, Detroit. Doctor Lucas will speak at the luncheon on Thursday, June 3 on "Multiple System Injuries."

Registration will be at 8:00 a.m. each morning. Further details can be obtained from the KMA Headquarters Office. A program outline for the Seminar follows:

Emergency Health Care Seminar Program—June 2 and 3

WEDNESDAY, JUNE 2

Morning Session

Registration—8:00 a.m.

"Orthopaedics"

"Immediate Management of Orthopaedic Emergencies"—D. Kay Clawson, M.D.

"Essentials of Orthopaedic Emergencies"—Donna Gish, R.N.

"Transportation of the Orthopaedic Emergency"—Thomas Kelley, Jr., M.D.

"On-the-Spot X-ray Interpretation"—James Lorman, M.D.

"Fractures and Dislocations of the Spine"—Lawrence Jelsma, M.D.

Orthopaedic Panel

Noon Luncheon

Speaker: Marshall Segal, M.D., J.D., Chicago

Afternoon Session

I. Basic Life Support Workshop
II. Advanced Life Support Workshop
III. Basic Splints and Traction Workshop

THURSDAY, JUNE 3

Morning Session

Registration—8:00 a.m.

"Dental Emergencies"—Robert Marcianni, D.M.D.

"Complications of Parturition"—Terrell Mays, M.D.

"The High Risk Newborn"—Billy Andrews, M.D.

"Triage Nursing"—Gay Hatfield, R.N.

"Immediate Management of Drug Reaction and Overdose"—Donald Thomas, M.D.

"Respiratory Arrest and Blood Gas Interpretation"—Barry Stoler, M.D.

"Early Support of the Heart Attack Victim"—Robert Hast, M.D.

Noon Luncheon

Speaker: Charles E. Lucas, M.D., Detroit

Afternoon Session

Special Interest Meetings Held Simultaneously By:

Kentucky Chapter, American College of Emergency Physicians

Emergency Department Nurses Association and Kentucky Nurses Association

Kentucky Dental Association

Emergency Medical Technicians

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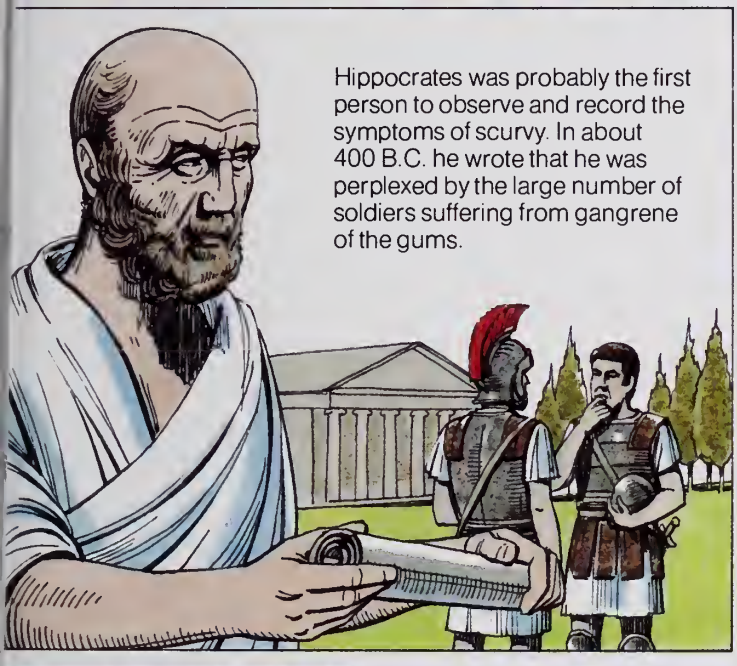
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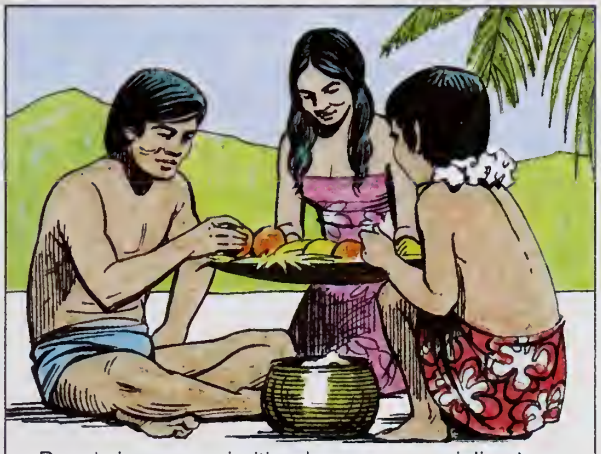
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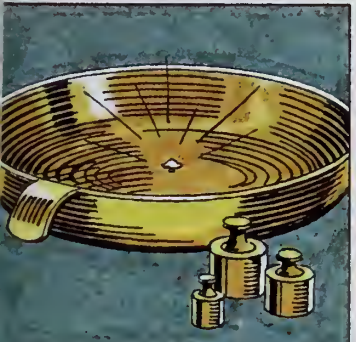




Hippocrates was probably the first person to observe and record the symptoms of scurvy. In about 400 B.C. he wrote that he was perplexed by the large number of soldiers suffering from gangrene of the gums.



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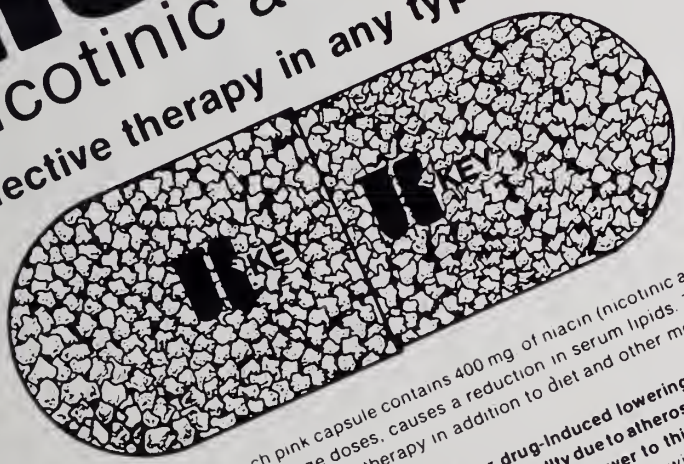
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PRECAUTIONS: Patients with diabetes, gall bladder disease, past history of jaundice, liver disease, or peptic ulcer should be observed closely. At initial stage of therapy, liver function and blood glucose should be monitored at frequent intervals. Adjustment of diet and/or hypoglycemic therapy may be necessary. Patients undergoing antihypertensive therapy may experience an added vasodilating effect with resulting postural hypotension. Use with caution in patients predisposed to gout.

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In Memoriam

CHARLES M. McKINLEY, M.D.
Lexington
1887-1976

Charles Miles McKinley, M.D., a pediatrician, died on March 23 at the age of 89. A 1911 graduate of Columbia University College of Physicians and Surgeons, Doctor McKinley was an emeritus member of the Fayette County Medical Society and the Kentucky Medical Association.

ROY H. MOORE, SR., M.D.
Louisville
1887-1976

Roy H. Moore, Sr., M.D., died on April 7 in Louisville. A general practitioner in Louisville until his retirement in 1969. Doctor Moore graduated from the University of Louisville Medical Department in 1910. He was an emeritus member of the Jefferson County Medical Society and the Kentucky Medical Association.

CHARLES M. GLASGOW, M.D.
Paducah
1929-1976

Charles M. Glasgow, M.D., Paducah, died on April 7 at the age of 42. A psychiatrist, Doctor Glasgow was a graduate of the University of Arkansas Medical School and received his doctorate in psychiatry from the University of Tennessee at Memphis. He belonged to the McCracken County Medical Society, the Kentucky Medical Association, and the American Medical Association.

Serous Cystadenoma of Ovary

(Continued from Page 233)

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BRIEF SUMMARY OF
PRESCRIBING INFORMATION
ANTIMINTH ® (pyrantel pamoate)
ORAL SUSPENSION

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13μg/ml) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with preexisting liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg of pyrantel base/ml) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg/lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 ml of Antiminth per 10 lb. of body weight. (One teaspoonful=5 ml.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

How Supplied. Antiminth Oral Suspension is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg pyrantel base per ml, supplied in 60 ml bottles and Unitcups™ of 5 ml in packages of 12.

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A division of Pfizer Pharmaceuticals
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One swallow does it



eliminates Pinworms and Roundworms with a single dose

■ **Single dose effectiveness against both pinworms and roundworms**— The only single-dose anthelmintic effective against pinworms *and* roundworms.

■ **Nonstaining**— to oral mucosa, stomach contents, stools, clothing or linen.

■ **Well tolerated** — the most frequently encountered adverse reactions are related to the gastrointestinal tract.

■ **Economical** — a single prescription will treat the whole family.

■ **Highly acceptable** — pleasant-tasting caramel flavor.

■ **Convenient** — just 1 tsp. for every 50 lbs. of body weight. May be taken without regard to meals or time of day.

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Please see prescribing information on facing page. NSN 6505-00-148-6967

Antiminth® ORAL SUSPENSION
(pyrantel pamoate) equivalent to 50mg pyrantel/ml

FROM THE EDITOR'S NOTEBOOK

Notes of medical and professional interest from a cross-section of America's journals.

Exercise and Heart Disease

Charles E. Kossman in his article on Atherosclerotic Coronary Artery Disease *(Advances in Internal Medicine,* Volume 21, 1976) states, "No data exists to support the theory that exercise is beneficial in the prevention of coronary artery disease." The author recognizes that exercise training can increase the maximal oxygen uptake and improve modified left ventricular function curves, but there are hazards of exercise: "Some years ago, when jogging first became popular, no less than five corpses, all clad in jogging clothes, were found on the byways of Rockland County, New York, in a period of one month." This subject is discussed further in the *Harvard Medical School Health Letter* (Volume 1, number 4, February 1976): "Exercise that enhances cardiovascular fitness and stamina must be a form of exercise that can significantly increase the pulse rate for a prolonged period of time." Jogging, swimming, rope-jumping, stationary bike riding are mentioned as ways of achieving sustained activity, but tennis, bowling, and golf do not do the job. Their recommendations are "sustained exercise for at least twenty minutes (after a warm up period) for at least three times per week. And this program should be achieved gradually over a period of weeks—even months for those who have not previously been physically active." A word of caution is added, "one should have a complete physical examination—including a stress electrocardiogram—before beginning any exercise program."

Clinician Versus Computer

From our neighbor in Indianapolis, Clement J. McDonald, M.D., comes a fascinating story: "Use of a Computer to Detect and Respond to Clinical Events: Its Effect on Clinical Behavior." *(Annals of Internal Medicine* 84:162-167, 1976). Doctor McDonald notes that "routine (but important) medical activity requires compulsive attention to protocol rather than intellectual brilliance," and that physicians make errors in the management of simple clinical events because of the restrictions of time, random interruptions and concomitances. The computer has an advantage in this setting since it "can do repetitive auditing functions tirelessly and flawlessly; humans cannot." It is apparent that the computer will be a helpful addition to patient care and economically feasible, too.

INH-NIH—Liver Injury

The National Institutes of Health Conference is reported in the *Annals of Internal Medicine* (84:181-192, 1976) under the title "Isoniazid Liver Injury: Clinical Spectrum, Pathology, and Probable Pathogenesis" by Jerry R. Mitchell et. al. and there are some important points: isoniazid liver injury closely resembles acute hepatitis pathologically and clinically except INH injury occurs usually in persons older than 35 years. "Most patients with subclinical hepatic damage recover completely while continuing to take isoniazid and do not progress to clinically overt hepatitis." The most important part of the article has to do with the prophylactic use of isoniazid: "it is difficult to justify any prophylactic use of a potentially lethal drug." And the conclusions of the Tuberculosis Advisory Committee of the Center for Disease Control were given: "the preventive use of isoniazid should be restricted in patients more than 35 years of age to an individual basis and considered only if a tuberculin reactor (1) was a member of a household with recently diagnosed tuberculosis, (2) had chest x-ray findings consistent with stable tuberculosis lesions, (3) had been recently infected, (4) was receiving prolonged adrenocortico- or immunosuppressive therapy, or (5) had leukemia, Hodgkin's disease, diabetes mellitus, silicosis, or a gastrectomy." It is also emphasized that "chemoprophylaxis should be stopped in patients more than 35 years of age who develop any biochemical evidence of liver injury." The message here is clear: isoniazid hepatic injury is risky, especially after age 35.

Low Dose Insulin for Diabetic Ketoacidosis

Leonard L. Madison, M.D., editorializes in the *New England Journal of Medicine* (294: 393-394, Feb. 12, 1976) and states that "low-dose insulin infusions in the treatment of diabetic ketoacidosis should be considered only a research tool" and feels there is no justification for "the widespread use of this regimen by practicing physicians." Karl Y. Hostetler, M.D., at the University of California in San Diego, however, had a different view and believes that the low-dose insulin regimen is simple, easy to carry out, and has less danger of hypokalemia and delayed hypoglycemia. But it should not be used in patients with known insulin resistance, those previously on high daily doses of insulin.

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are nothing new.

12-hour relief is.



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Each capsule contains pseudoephedrine hydrochloride 120 mg. and chlorpheniramine maleate 8 mg.

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It goes the distance.





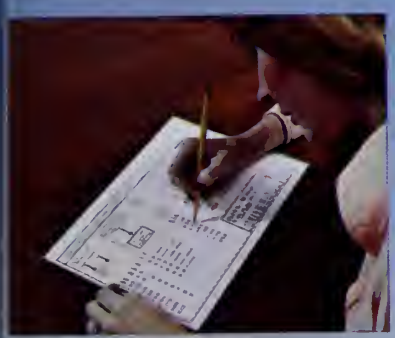
Clinical studies confirm full 12-hour effectiveness.

or years, patients have heard of drugs providing long-lasting relief. But after six or eight ours, they often run out of relief. And it's too soon to take the next dose.

Now, with Novafed A, Dow introduces a prescription capsule with 12-hour effectiveness n relieving allergy and hay fever symptoms. Placebo-controlled clinical studies show hat the high level of decongestant in Novafed A provides relief for as long as 12 hours. At the same time, its antihistamine relieves the patient's itchy eyes and runny nose *vithout* the excessive dryness of anticholinergic agents.

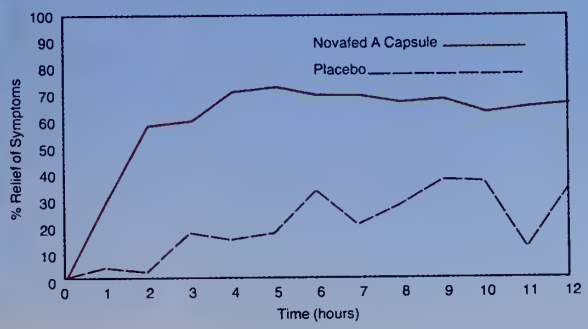
Prompt onset of effect is followed by full 12-hour relief.

Please refer to the following page for bioavailability studies and prescribing information.)



Patients with severe pollen allergies were tested during hay fever season in a countryside environment and asked to rate severity of five different symptoms on a scale of 1 to 4.

Clinical Study: Degree of Relief from Itchy Eyes and Nose and Throat, Watery Eyes, Runny Nose*



*Unpublished data, Medical Department Files, Dow Pharmaceuticals, The Dow Chemical Company, Indianapolis, Indiana.

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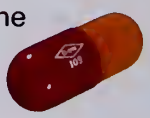
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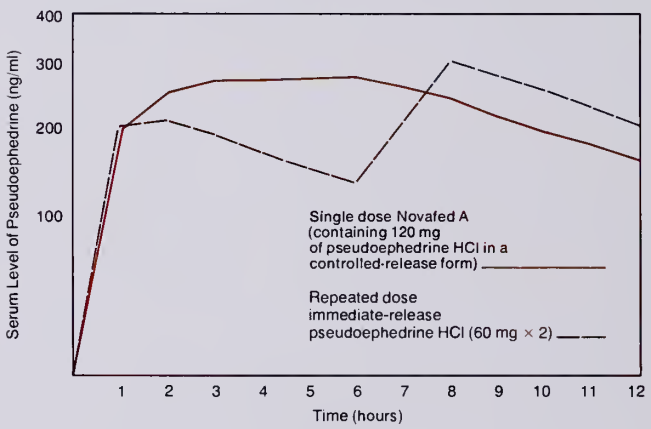
Prompt onset and sustained serum levels over 12 hou

A bioavailability study confirmed that the sustained 12-hour action of Novafed A was comparable to that of immediate-release medication taken at 6-hour intervals.

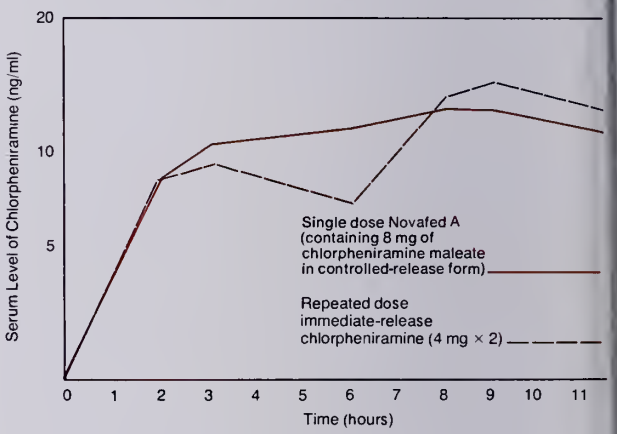
The chart at the left shows the serum levels of pseudoephedrine. Initial serum levels following one Novafed A Capsule were comparable to those following a single dose of 60 mg. pseudoephedrine hydrochloride in an immediate-release form. Serum levels of pseudoephedrine over a 12-hour period following a single dose of Novafed A were also comparable to those obtained by an immediate-release form taken every 6 hours.

The chart at the right shows the serum levels of chlorpheniramine. Initial serum levels following one Novafed A Capsule were comparable to those follow a single dose of 4 mg. chlorpheniramine maleate in an immediate-release form. Serum levels of chlorpheniramine over a 12-hour period following a single dose of Novafed A were also comparable to those obtained by an immediate-release form taken every 6 hours.

Comparison of Mean Serum Levels of Pseudoephedrine Following Novafed A and an Immediate-Release Reference Formulation*



Comparison of Mean Serum Levels of Chlorpheniramine Followi Novafed A and an Immediate-Release Reference Formulation*



*Unpublished data, Medical Department Files, Dow Pharmaceuticals, The Dow Chemical Company, Indianapolis, Indiana.

DESCRIPTION: Each NDVAFED A capsule contains 120 mg. of pseudoephedrine hydrochloride and 8 mg. of chlorpheniramine maleate. The specially formulated pellets in each capsule are designed to provide continuous therapeutic effect for about 12 hours. Nearly one-half of the active ingredients is released soon after administration and the remainder is released slowly over the remaining time period.

ACTIONS: NDVAFED A combines the action of a nasal decongestant, pseudoephedrine hydrochloride, and an antihistamine, chlorpheniramine maleate. These ingredients are combined to provide prompt and sustained nasal and upper respiratory decongestant and antihistaminic action.

INDICATIONS: NDVAFED A is indicated for the relief of nasal congestion and eustachian tube congestion associated with the common cold, sinusitis and acute upper respiratory infections. It is also indicated for perennial and seasonal allergic rhinitis, vasomotor rhinitis, allergic conjunctivitis due to inhalant allergens and foods and for mild, uncomplicated allergic skin manifestations of urticaria and angioedema. Decongestants in combination with antihistamines have been used for many years to relieve eustachian tube congestion associated with acute eustachian salpingitis, aerotitis media, acute otitis media and serous otitis media. NDVAFED A may be given concurrently, when indicated, with analgesics and antibiotics.

CONTRAINDICATIONS: Symphathomimetic amines are contraindicated in patients with severe hypertension, severe coronary artery disease, and in patients on MAD inhibitor therapy. Antihistamines are contraindicated in patients with narrow-angle glaucoma, urinary retention, peptic ulcer, during an asthmatic attack, and in patients receiving MAD Inhibitors.

Children under 12: NDVAFED A controlled-release capsules should not be used in children less than 12 years of age.

Nursing Mothers: Pseudoephedrine is contraindicated in nursing mothers because of the higher than usual risk for infants from sympathomimetic amines.

Hypersensitivity: This drug is contraindicated in patients with hypersensitivity or idiosyncrasy to sympathomimetic amines or antihistamines. Patient idiosyncrasy to adrenergic agents may be manifested by insomnia, dizziness, weakness, tremor or arrhythmias.

WARNINGS: Sympathomimetic amines should be used judiciously and sparingly in patients with hypertension, diabetes mellitus, ischemic heart disease, increased intraocular pressure, hyperthyroidism, or prostatic hypertrophy. Sympathomimetics may produce central nervous system stimulation and convulsions or cardiovascular collapse with accompanying hypotension.

Antihistamines may impair mental and physical abilities required for the performance of potentially hazardous tasks, such as driving a vehicle or operating machinery, and mental alertness in children. Chlorpheniramine maleate has an atropine-like action and should be used with caution in patients with increased intraocular pressure, hyperthyroidism, cardiovascular disease, hypertension or in patients with a history of bronchial asthma.

Do not exceed recommended dosage.

Use In Pregnancy: The safety of pseudoephedrine for use during pregnancy has not been established.

Use In Elderly: The elderly (60 years and older) are more likely to have adverse reaction to sympathomimetics. Overdosage of sympathomimetics in this age group may cause hallucinations, convulsions, CNS depression, and death. Therefore, safe use of a short-acting sympathomimetic should be demonstrated in the individual elderly patient before considering the use of a sustained-action formulation.

PRECAUTIONS: This drug should be used with caution in patients with diabetes, hypertension, cardiovascular disease and hyperreactivity to ephedrine. The antihistaminic may cause drowsiness and ambulatory patients who operate machinery or motor vehicles should be cautioned accordingly.

ADVERSE REACTIONS: Hyperreactive individuals may d play ephedrine-like reactions such as tachycardia, palp tions, headache, dizziness, or nausea. Patients sensitiv to antihistamines may experience mild sedation.

Sympathomimetic drugs have been associated with cert untoward reactions including fear, anxiety, tenseness, restlessness, tremor, weakness, pallor, respiratory diffi culty, dysuria, insomnia, hallucinations, convulsions, C depression, arrhythmias, and cardiovascular collapse w hypotension.

Possible side effects of antihistamines are drowsiness, restlessness, dizziness, weakness, dry mouth, anorexia, nausea, headache and nervousness, blurring of vision, heartburn, dysuria and very rarely, dermatitis.

DRUG INTERACTIONS: MAD inhibitors and beta adrener blockers increase the effect of sympathomimetics. Sympathomimetics may reduce the antihypertensive effects methyldopa, mecamylamine, reserpine and veratrum alkaloids. Concomitant use of antihistamines with alcoh tricyclic antidepressants, barbiturates and other central nervous system depressants may have an additive effect.

DOSAGE AND ADMINISTRATION: One capsule every 12 hours. Do not give to children under 12 years of age.

CAUTION: Federal law prohibits dispensing without prescription.

HOW SUPPLIED: NDVAFED A is supplied in red and ora colored hard gelatin capsules, monogrammed with the Dow diamond followed by the number 109, in bottles of 100.

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LIBRIUM®
(chlordiazepoxide HCl)

FOR ALL THE RIGHT REASONS.

- prompt and specific action
- documented benefit-to-risk ratio
- three dosage strengths to meet most therapeutic needs



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.
Contraindications: Patients with known hypersensitivity to the drug.
Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.
Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.
Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.
Usual Daily Dosage: Individualize for maximum beneficial effects. *Oral—Adults:* Mild and moderate anxiety and tension, 5 or 10 mg *t.i.d.* or *q.i.d.*; severe states, 20 or 25 mg *t.i.d.* or *q.i.d. Geriatric patients:* 5 mg *b.i.d.* to *q.i.d.* (See Precautions.)
Supplied: Librium® (chlordiazepoxide HCl) *Capsules*, 5 mg, 10 mg and 25 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10. Libritabs® (chlordiazepoxide) *Tablets*, 5 mg, 10 mg and 25 mg—bottles of 100 and 500. With respect to clinical activity, capsules and tablets are indistinguishable.

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LIBRIUM®
chlordiazepoxide HCl/Roche
5mg, 10mg, 25mg capsules

Please see following page.

LIBRIUM®
(chlordiazepoxide HCl)

FOR ALL THE RIGHT REASONS.

Yesterday's decision to use Librium for a clinically anxious patient was based on several good reasons. Safety. Effectiveness. Versatility. And the reasons you chose it yesterday are as valid today.

Librium has accumulated an unsurpassed clinical record. A record validated in several thousand papers published both here and abroad.

Librium, when used in proper dosage, rarely interferes with a patient's mental acuity or ability to perform. However, as with all CNS-acting agents, good medical practice suggests that patients be cautioned against hazardous activities requiring complete mental alertness.

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chlordiazepoxide HCl/Roche

Please see preceding page for summary of product information.



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The Journal of The KENTUCKY Medical Association

Roundworm Infections of the Gastrointestinal Tract
Joseph Burke, M.D. 279

The Management of Gynecologic Malignancy at UKMC
J. R. van Nagell, Jr., M.D., E. S. Donaldson, M.D., Y. Maruyama, M.D. and J. Utley, M.D. 286

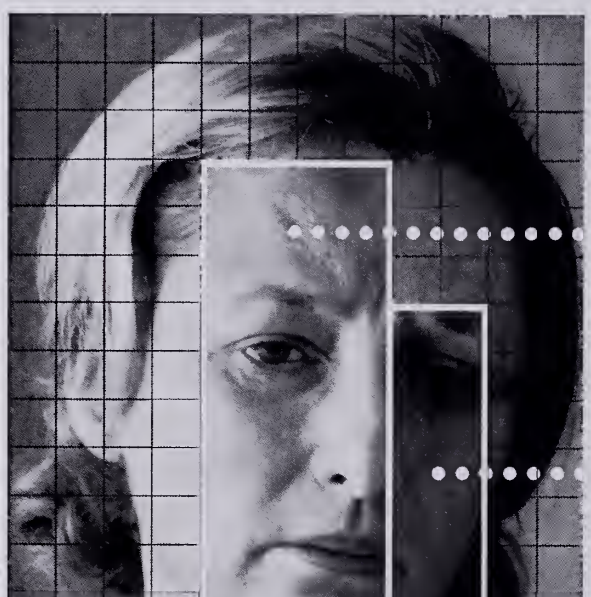
Syphilis—CDC Recommended Treatment Schedules, 1976 303

Primary Care: A Descriptive Approach
W. Grady Stumbo, M.D. 309

Complete Contents on Page 271

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Both often



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.



Valium®
(diazepam) Ⓥ

2-mg, 5-mg, 10-mg scored tablets

in psychoneurotic anxiety states with associated depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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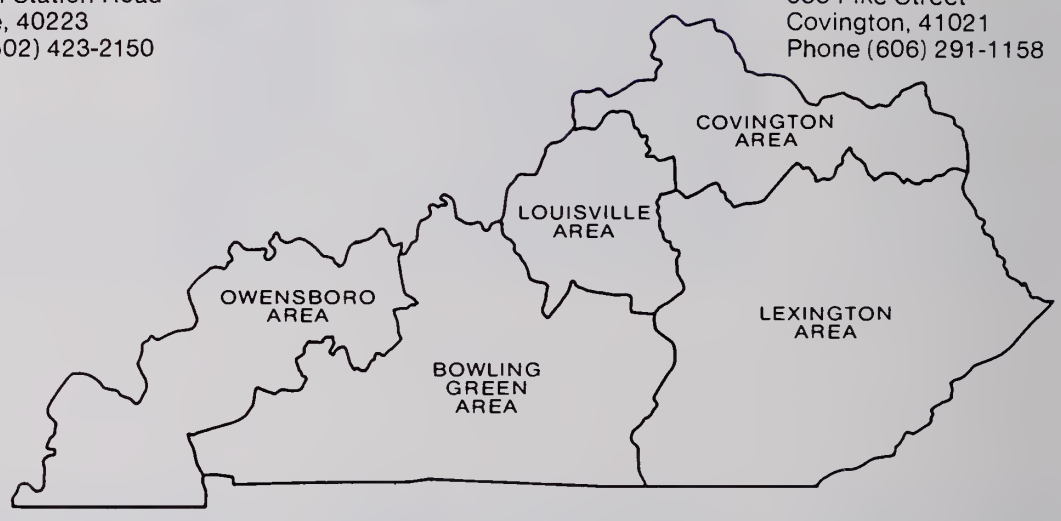

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MESSAGE FROM THE PRESIDENT

It has been my pleasure for a number of years to be asked by the President of KMA to write the President's Page for the June issue of *The Journal of KMA*. As I reflect upon the years it has been my privilege to serve KMA as a Delegate to the American Medical Association, I am constantly made aware of the vast changes which are taking place throughout this nation in the practice of medicine.

Many organizations purporting to represent physicians have sprung up in the past decade. I do not need to enumerate these organizations by name. They are known to all of you. My message in this President's Page is a very simple one. It is that in spite of problems, social upheaval, massive changes in ideas and ideals, there is only one organization which truly represents all of medicine and that is AMA. Without a strong national voice, we cannot be heard. Without a unifying force, we cannot be effective. Without organization we can never attain the goals to which we aspire as physicians.

As I write my final President's Page as the Senior Delegate to AMA, I urge each and every Kentucky physician to join AMA, support the principles which it espouses, and work in concert for a stronger, unifying national force which has and will continue to speak distinctly for all physicians throughout this country. It has been an extremely rewarding experience for me to have represented you as a Delegate to the American Medical Association.

J. Thomas Giannini, M.D.,
Senior Delegate to AMA

This is the third in a series of articles written at the request of KMA President David A. Hull, M.D.

Report From KMA Cancer Committee——

Thyroid Cancer Induced by Prior Radiation of the Head or Neck

In October, 1975, the AHA and the AMA advised their constituent societies to address themselves to the problem of radiation-induced thyroid cancer. The population at risk included children and young adults who had received X-radiation to the head or neck 5 to 25 years earlier as therapy for enlarged thymus, tonsils, adenoids, etc., or for acne.

In Kentucky, the KMA charged its Cancer Committee to study this problem and recommend methods of dealing with it. Consequently, members of this Committee have conferred with physicians at the two medical schools and throughout the state in order to assess the scope of the problem. Evidence gathered to date suggests that thyroid cancer related to prior radiation is a rarity here and, therefore, extensive and costly screening efforts are probably not indicated. The Committee welcomes and solicits pertinent information from any physician who has treated a patient with thyroid cancer who had a history of earlier radiation to the head or neck.

The Committee recommends that physicians endeavor to educate their colleagues to recognize this disease entity and to institute appropriate investigation and treatment.

Thyroid cancer generally presents as single or multiple nodules in the thyroid gland or as an abnormal consistency in a gland in which thyroid antibodies are negative. In some patients, a cold nodule is demonstrated only by scan. All investigators have emphasized that a careful physical examination of the neck is the most important part of the entire screening evaluation. Thyroid function test and thyroid scan are also indicated. Results of thorough screening in several series have confirmed that approximately 7% of the exposed population mentioned previously will develop thyroid cancer.

The medical and surgical management of a palpatory abnormality has been well documented. Subtotal thyroidectomy with care to maintain the integrity of the recurrent laryngeal nerves and the viability of the parathyroid glands is generally the treatment of choice. Postoperatively, thyroid hormone replacement is begun. Several months later the thyroid medication is discontinued for three weeks and a total body scan done. If any iodine uptake is present in the neck or periphery or both, the patient receives an ablative dose of radioactive iodine. Thyroid medication is then restarted and continued for life.

The Committee also recognizes the need for public information and recommends that the Bureau for Health Services be asked to manage the release of information to the general public and to do so without creating undue alarm.

If it develops that the problem is greater than we suspect, further recommendations will be made. Anyone wishing to report treatment of a patient with thyroid cancer, or having any information on the subject, should send this information to the Cancer Committee of the Kentucky Medical Association.

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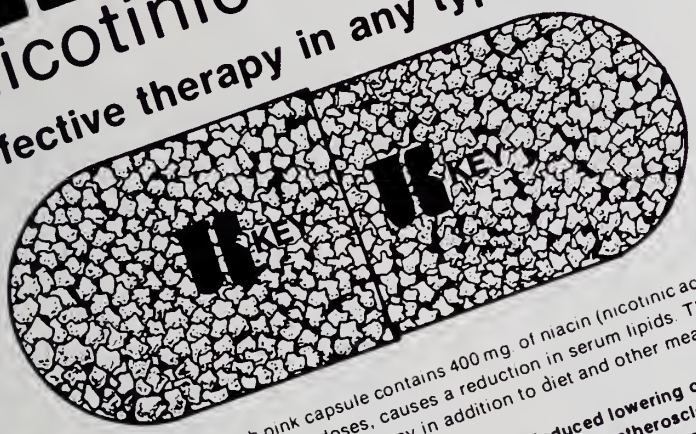
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Testing in Humans: Who, Where & When.

e weight of ethical opinion:

Few would disagree that the effectiveness and safety of any therapeutic agent device must be determined through nical research.

But now the *practice* of clinical research is under appraisal by Congress, the ess and the general public. Who shall minister it? On whom are the products e tested? Under what circumstances? d how shall results be evaluated and lized?

The Pharmaceutical Manufacturers sociation represents firms that are significantly engaged in the discovery and velopment of new medicines, medical vices and diagnostic products. Clinical earch is essential to their efforts. Consequently, PMA formulated positions ich it submitted on July 11, 1975, to e Subcommittee on Health of the Sen- Labor and Public Welfare Committee, ts official policy recommendations. re are the essentials of PMA's current nking in this vital area.

1. PMA supports the mandate and ssion of the National Commission for Protection of Human Subjects of medical and Behavioral Research and rs to establish a special committee mposed of experts of appropriate ciplines familiar with the industry's earch methodology to volunteer its vice to the Commission.

2. PMA supports the formation of an dependent, expert, broadly based and resentative panel to assess the current te of drug innovation and the impact n it of existing laws, regulations and cedures.

3. When FDA proposes regulations, hould prepare and publish in the *Federal Register* a detailed statement assessg the impact of those regulations on g and device innovation.

4. PMA proposes that an approprily qualified medical organization be couraged to undertake a comprehene study of the optimum roles and ponsibilities of the sponsor and physin when company-sponsored clinical earch is performed by independent nical investigators.

5. PMA recognizes that the physician-investigator has, and should have, the ultimate responsibility for deciding the substance and form of the informed consent to be obtained. However, PMA recommends that the sponsor of the experiment aid the investigator in discharging this important responsibility by providing (1) a document detailing the investigator's responsibilities under FDA regulations with regard to patient consent, and (2) a written description of the relevant facts about the investigational item to be studied, in comprehensible lay language.

6. In the case of children, the sponsor must require that informed consent be obtained from a legally appropriate representative of the participant. Voluntary consent of an older child, who may be capable of understanding, in addition to that of a parent, guardian or other legally responsible person, is advisable. Safety of the drug or device shall have been assessed in adult populations prior to use in children.

7. PMA endorses the general principle that, in the case of the mentally infirm, consent should be sought from both an understanding subject and from a parent or guardian, or in their absence, another legally responsible person.

8. Pharmaceutical manufacturers sponsoring investigations in prisons must take all reasonable care to assure that the facilities and personnel used in the conduct of the investigations are suitable for the protection of participants, and for the avoidance of coercion, with a respect for basic humanitarian principles.

9. Sponsors intending to conduct non-therapeutic clinical trials through the participation of employee volunteers should expand the membership and scope of its existing Medical Research Committee, or establish such an internal Medical Research Committee, with responsibility to approve the consent forms of all volunteers, designs, protocols and the scope of the trial. The Committee should also bear responsibility to ensure full compliance with all procedures intended to protect employee volunteers' rights.

10. Where the sponsor obtains medical information or data on individuals, it shall be accorded the same confidential status as provided in codes of ethics governing health care professionals.

11. PMA and its member firms accept responsibility to aid and encourage appropriate follow-up of human subjects who have received investigational products that cause latent toxicity in animals or, during their use in clinical investigation, are found to cause unexpected and serious adverse effects.

12. PMA supports the exploration and development by its member companies of more systematic surveillance procedures for newly marketed products.

13. When a pharmaceutical manufacturer concludes, on the basis of early clinical trials of a basic new agent, that a new drug application is likely to be submitted, a proposed development plan accompanied by a summary of existing data, would be submitted to the FDA. Following a review of this submission, the FDA, and its Advisory Committee where appropriate, would meet with the sponsor to discuss the development plan. No *formal* FDA approval should be required at this stage. Rather, the emphasis should be on identification of potential problems and questions for the sponsor's further study and resolution as the program develops.

The PMA believes that health professionals as well as the public at large should be made aware of these 13 points in its Policy on Clinical Research. For these recommendations envisage constructive, cooperative action by industry, research institutions, the health professions and government to encourage creative and workable responses to issues involved in the clinical investigation of new products.

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Roundworm Infections of the Gastrointestinal Tract Current Concepts

JOSEPH A. BURKE, M.D.*

Lexington, Kentucky

Human roundworm infections are common. This brief review discusses the diagnosis, treatment, and clinical manifestations of roundworm infections of the gastrointestinal tract that are frequently encountered in Kentucky.

ROUNDWORM infections of the gastrointestinal tract are a major public health problem. A recent report estimates that there are tens of millions of helminthic infections in the continental United States.[1] While many of these infections are benign or asymptomatic, some cause significant morbidity and mortality.[2-6]

During the past decade many changes have occurred in the list of drugs recommended for the treatment of human parasitic infections.[7,8] Some drugs are no longer used because of unacceptable toxicity; others, though available and used, have been replaced as "drugs of choice"; and new drugs have been introduced and have assumed an important role in chemotherapy.[9]

It seems timely to review the current treatment of those roundworm infections of the gastrointestinal tract that are encountered with some frequency in Kentucky. (See Table 2 for complete treatment review). In addition, the clinical manifestations and diagnosis of these infections will be reviewed as well as those aspects of a parasite's life cycle that are likely to have clinical implications.

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I. Ascariasis

Life cycle.[10] Ascariasis is a potentially lethal infection caused by *Ascaris lumbricoides,* the largest of the roundworms that parasitize man. The adult female worm measures 20 to 35 cm (8 to 14 inches) in length and 3 to 6 mm in diameter. Its normal habitat is the lumen of the small intestine of man. The ovipositing female lays 200,000 eggs per day and has a total egg laying capacity of about 26 million. Fertilized eggs reach the external environment in the feces in a noninfective, one-celled stage. In soil under favorable environmental conditions, the eggs embryonate and become infective within two to three weeks. They remain viable months to years. Man becomes infected by ingesting infective eggs that have been introduced into the mouth by geophagia or on a contaminated finger, food, or fomites. Rhabditiform larvae are released in the small intestine after the eggs are swallowed. The larvae penetrate the intestinal mucosa, enter the portal circulation, are carried to the liver, and thence to the right heart and the lungs. They break out of the pulmonary capillaries into the alveoli and mature for about ten days. The larvae then ascend the respiratory tract to the pharynx, are swallowed, pass to the small intestine, and mature into adults. The time interval from the ingestion of infective ova to the appearance of sexually mature adults is 2 to 2½ months. The life span of the adult worm is 6 to 18 months.

Clinical manifestations. If larvae are present in sufficient numbers during the pulmonary migration stage, a pneumonitis characterized by fever, cough, wheezing, pulmonary infiltrates, and

Table 1
DIAGNOSIS OF INTESTINAL ROUNDWORMS

Parasite	Diagnostic Procedure
Ascaris lumbricoides	1. Stool for ova 2. Identification of adult worms passed in stool or via the oral or nasal passages 3. Occasionally adult worms are demonstrated during roentgenographic examination of the small intestine.
Necator americanus	Stool for ova
Trichuris trichiura	Stool for ova
Strongyloides stercoralis	1. Larvae in fresh stool or duodenal aspirate 2. Larvae and/or ova in small intestinal biopsy
Enterobius vermicularis	1. Scotch tape swab of perianal skin for ova 2. Identification of adult female worm(s) found on the perianal skin or on the surface of a freshly passed stool 3. Scrapings from beneath the finger nails*

*Eggs may be found in scrapings obtained from beneath the fingernails in about one-third of infected children.

marked peripheral eosinophilia (> 20%) may develop.[11] "Ascaris pneumonia" is difficult to prove and rarely diagnosed. Larvae need to be identified in sputum or gastric aspirate before a definitive diagnosis is made.

A majority of patients harboring adult ascarids have light infections and are asymptomatic. The infection in such patients is usually discovered after an adult worm is passed or after a stool specimen is examined because of eosinophilia. The most common complaint of patients with symptomatic ascariasis is abdominal pain; it is often intermittent and colicky in nature but may be a dull persistent rather vague discomfort. Of more serious import are the complications of ascariasis,[12] such as partial or complete intestinal obstruction which may occur when a large number of worms become knotted together. Migration of adult worms into the common bile duct, the main pancreatic duct, or the liver can cause acute biliary colic, acute cholangitis, acute pancreatitis, or hepatic abscesses. If meandering adults reach the nasopharynx and are accidentally inhaled, asphyxia and death may ensue. In patients with a long standing infection, peripheral eosinophilia is usually mild (5 to 10%) and may be absent.

Diagnosis. Diagnostic procedures for roundworm infections discussed in this paper are summarized in Table 1. The diagnosis of ascariasis is generally made by finding characteristic eggs in feces. Since the egg output per worm is very high, they are usually numerous in direct fecal smears. A diagnosis of ascariasis is sometimes based on the recovery and identification of a mature worm passed per anum, mouth, or nares. Adult worms are also occasionally identified radiologically.

Treatment. The details about treatment for those roundworms discussed in this paper are summarized in Table 2. Pyrantel pamoate is the drug of choice for ascariasis. Its principal advantage is that a single dose is usually effective. Anorexia, nausea, vomiting, headache, and dizziness are occasional side effects. Mebendazole is a safe, effective alternative drug. The major disadvantages of mebendazole are that it requires three days of administration and it is relatively expensive. Piperazine is inexpensive, safe, and effective. A two-day course of treatment will cure greater than 90% of patients. Nausea, vomiting, diarrhea, urticaria, dizziness, and ataxia are infrequently associated with its use. Piperazine has been given during pregnancy without adverse effects. All infections with *Ascaris lumbricoides* should be treated because of the potential of this organism to produce serious complications.

II. Enterobiasis

Life cycle. Enterobiasis, an infection with the pinworm (*Enterobius vermicularis*), is the most common helminthic infection in the United States. Recent estimates of its prevalence are 30% in children and 16% in adults.[1] The pinworm resides in the lumen of the cecum as well as the adjacent large and small intestine. The adult female worm is visible to the naked eye and measures 8 to 12 mm (5/16 to 7/16 in.) in length. The male is considerably smaller and seldom observed. After copulation in the cecal region, the gravid females migrate at night from the intestine to the perianal or perineal regions where their eggs are deposited. The eggs, which contain a coiled larvae, mature and become infective several hours after oviposition. The ova remain viable for two to seven days in a cool moist environment. If infective eggs are ingested, the first stage larvae are released in the duodenum. They develop to maturity within the bowel lumen without a tissue migrating stage. The time interval from the ingestion of infective eggs to the development of gravid females ranges from one to three months. The female worm dies shortly after oviposition.

Man is the only known host for *Enterobius*

vermicularis. A common means of reinfection is direct transfer of eggs from the perianal region to the mouth by contaminated fingers. The inhalation and swallowing of airborne eggs, the handling of contaminated fomites, such as bedding, undergarments, and bathroom fixtures, and retroinfection are additional avenues of infection.

Clinical manifestations. Most pinworm infections are asymptomatic.[13] Why some infections become symptomatic is not understood. Anal pruritus is the most common complaint of patients with symptomatic infections. It is most intense at night and may cause disturbed sleep and result in daytime irritability. Concomitant perianal and/or perineal irritation and excoriation may occur. Occasionally a gravid female migrates into the vagina causing irritation and vaginitis. Very rarely a female reaches the uterus, a fallopian tube, or the peritoneal cavity and leads to the formation of a granuloma. Although pinworms are frequently found in the appendix, they seldom, if ever, cause appendicitis. Peripheral eosinophilia is not a typical finding in enterobiasis because the pinworm does not have a tissue migratory stage.

Diagnosis. Enterobiasis is usually diagnosed by finding eggs on a scotch tape preparation obtained by applying the sticky surface of cellophane tape to the perianal or perineal skin in the morning before defecation and bathing. A single examination detects 50% of infections; three preparations on successive days uncover 90% of infections. A routine stool examination for ova and parasites is rarely helpful, being positive in only 5% of infected individuals. The diagnosis is sometimes made by finding a female worm on the perianal skin or on the surface of a bowel movement.

Treatment. Pyrantel pamoate, pyrivinium pamoate, mebendazole, piperazine, and thiabendazole are effective drugs for the eradication of a pinworm infection.[14-16] An advantage of the first three drugs is their effectiveness in a single dose. Pyrantel pamoate and mebendazole have infrequent side effects and are the drugs of choice. Pyrivinium pamoate is equally effective but more

Table 2
TREATMENT OF ROUNDWORM INFECTIONS OF THE GASTROINTESTINAL TRACT

Parasite	Drug of Choice	Dose	Alternative Drugs	Dose
Ascaris lumbricoides (Large roundworm)	Pyrantel pamoate (Antiminth)	11 mg/kg (1 ml per 10 lbs body weight) in a single dose; maximum total dose 1 gm	Piperazine citrate (Antepar)	75 mg/kg (1 wafer, 1 tablet or 5 ml of syrup per 15 lbs body weight) once daily for 2 days; maximum total dose 3.5 gm
			or Mebendazole (Vermox)	100 mg (1 tablet) twice daily for 3 days; same dose regardless of body weight
Enterobius vermicularis (Pinworm)	Mebendazole (Vermox)	100 mg in a single dose regardless of body weight	Pyrivinium pamoate (Povan)	5 mg/kg (1 tablet or 5 ml of suspension per 20 lbs body weight) in a single dose; repeat after 2 weeks
	or Pyrantel pamoate (Antiminth)	11 mg/kg (1 ml per 10 lbs body weight in a single dose; maximum total dose 1 gm	Piperazine citrate (Antepar)	65 mg/kg once daily for 7 days; maximum dose 2.5 gm; repeat after 2 weeks
Strongyloides stercoralis (Threadworm)	Thiabendazole (Mintezol)	25 mg/kg (1/2 tablet or 2.5 ml of suspension per 25 lbs body weight) twice daily for 2 days	Pyrivinium pamoate	5 mg/kg once daily for 7 days
Trichuris trichiura (Whipworm)	Mebendazole (Vermox)	100 mg twice daily for 3 days; same dose regardless of body weight	Hexylresorcinol enemas	See text
Necator americanus (New World hookworm)	Mebendazole (Vermox)	100 mg twice daily for 3 days; same dose regardless of body weight	Pyrantel pamoate (Antiminth)	11 mg/kg once daily for 3 days; maximum daily dose 1 gm
			or Tetrachloroethylene	0.12 ml/kg in a single dose; maximum total dose 5 ml
			or Bephenium hydroxynaphthoate (Alcopora)	Adults and children > 50 lbs: one 5 gm packet twice daily for 3 days; < 50 lbs, 1/2 packet (2.5 gm) twice daily for 3 days

likely to produce nausea and vomiting. Another disadvantage of pyrivinium is that it turns the stool red and if spilled it stains clothing. Piperazine is safe and effective but it must be given for seven days. An appreciable incidence of side effects are associated with the use of thiabendazole.

The treatment of an individual with pinworm infection is frequently unsatisfactory if other infected members of the household are untreated and remain as sources of reinfection. Thus, it is recommended that all persons (or at least all infected persons) in a household be treated simultaneously. Some authorities also advise that the initial course of treatment be repeated after two to three weeks. It is relatively easy to eradicate the pinworm as all recommended drugs are almost 100% curative. An apparent persistence of infection after treatment is usually due to reinfection from an outside source and not drug resistance.

III. Strongyloidiasis

Life cycle. The parasitic form of *Strongyloides stercoralis* is the tiny, threadlike female which measures just over 2 mm in length. Their principal habitat is the duodenum and jejunum although in very heavy infections worms may extend from the pyloric canal to the transverse colon. The fertilized female lives embedded within the intestinal wall. Each worm deposits 30 to 40 eggs per day within the intestinal mucosa. The eggs hatch within the mucosa and release rhabditiform larvae that migrate back to the intestinal lumen and enter the fecal stream.

There are three types of life cycle. In the direct cycle, the rhabditiform larvae are passed in the feces and develop into infective filariform larvae in soil within 24 to 48 hours. An infection is initiated when these filariform larvae penetrate the skin. They migrate to the venous circulation and are carried to the lungs. The larvae break out of the pulmonary capillaries into the alveoli, moult twice within the alveolar air spaces, ascend the respiratory tract to the pharynx, are swallowed and pass to the small intestine where they develop into adults. Sexually mature worms appear about one month after skin penetration. In the second type of life cycle, i.e., the indirect or free-living cycle, rhabditiform larvae passed in the feces develop into sexually mature, free-living males and females in the soil. After fertilization, the gravid female deposits eggs in the soil and new rhabditiform larvae are produced. They may repeat the indirect life cycle or develop into filariform larvae which are infective to man. Autoinfection is the third type of life cycle. Under circumstances that are not well understood, rhabditiform larvae mature into infective filariform larvae within the intestine before leaving the host. These infective larvae may enter the venous circulation and be carried to the lung by penetrating the intestinal mucosa (internal autoinfection) or the perianal skin (external autoinfection). Strongyloidiasis may persist for decades in the same host if repeated autoinfection occurs.

Clinical manifestations. The initial cutaneous penetration by infective larvae usually produces no symptoms. However, after multiple reinfections a local pruritic papule may develop at the site of penetration, which is usually the foot. Repeated external autoinfection may cause a creeping, pruritic eruption involving the buttocks and often the thighs, perineum, and abdomen called "larvae currens". The reaction of the lungs to migrating larvae is generally mild although a Loeffler's syndrome occasionally accompanies their transpulmonary passage. Most intestinal infections are light and produce no symptoms. Epigastric pain and tenderness, anorexia, nausea, vomiting, weight loss, and diarrhea alternating with constipation are observed in heavier infections. Strongyloidiasis should be suspected when peptic ulcer-like symptoms occur in association with eosinophilia and intermittent diarrhea. In very heavy infections, the mucosal involvement may be severe enough to produce a celiac-like malabsorption syndrome, a protein losing enteropathy, or chronic dysentery with blood in the stool. Patients treated with corticosteroids or immunosuppressants may have an unrecognized, asymptomatic infection when *Strongyloides* transform into an overwhelming infection via the process of massive internal autoinfection.[17-19] In addition to vague symptoms such as malaise, anorexia, weight loss, fever, cough, abdominal pain, and abdominal tenderness, these patients may present with pneumonia, severe enterocolitis, or gram-negative sepsis. The sudden deterioration of an immunosuppressed patient should suggest the possibility of overwhelming strongyloidiasis. Even when recognized and treated, hyperinfection is often fatal. Paradoxically, eosinophilia is uncommon in these overwhelming infections.

Diagnosis. Strongyloidiasis is usually diagnosed by finding rhabditiform larvae in fresh feces. Sev-

eral specimens need to be examined because the larvae are intermittently shed. It is also frequently necessary to concentrate the stool specimens, especially in light infections.[5,20] Duodenal fluid should be studied if repeated stool examinations are negative in a suspected case. If there is pulmonary involvement, the sputum should be examined for larvae.

Treatment. All patients with strongyloidiasis should be treated. Thiabendazole is the drug of choice. Bothersome side effects that are frequently reported include anorexia, nausea, vomiting, and dizziness. Less common adverse effects are diarrhea, epigastric discomfort, pruritus, drowsiness, and headache. Because central nervous system side effects may occur, activities requiring mental alertness should be prohibited during treatment. Satisfactory cure rates are obtained with pyrivinium pamoate if thiabendazole is not tolerated. Nausea and vomiting are infrequent if the tablet form of pyrivinium is given after meals. An initial course of treatment may fail in 20% of cases; retreatment is indicated and usually successful.

IV. Trichuriasis

Life cycle. Trichuriasis is an intestinal infection caused by *Trichuris trichiura,* the whipworm, so named because it resembles a tiny whip. The adult worms, which measure 3 to 5 cm in length, live in the large intestine with their attenuated anterior portion embedded in the mucosa. In light infections, most worms attach to the cecum; in very heavy infections, worms may extend from the lower ileum to the rectum. Each gravid female lays 3,000 to 10,000 eggs per day. The fertilized eggs are eliminated with the feces and if they are deposited on warm, moist, shaded soil, an infective rhabditiform larvae develops in two to four weeks. Man is infected when embryonated eggs are ingested. The coiled larvae are released from inside their shell in the duodenum and enter the crypts of Lieberkuhn. Here they feed and develop for about one week and then re-enter the bowel lumen and migrate to the cecum. The time interval from the ingestion of an infective egg to the development of an ovipositing female is one to three months. The adult life span is four to eight years.

Clinical manifestations. The vast majority of infections with *Trichuris* are light and produce no symptoms. Heavy worm burdens may cause nausea, vomiting, weight loss, right lower quadrant abdominal pain, and chronic mucoid diarrhea. Very heavy infections may be associated with generalized abdominal cramps, chronic dysentery with bloody stools, tenesmus, and rectal prolapse. The prolapsed rectum is covered with flesh-colored worms and has been referred to as the "coconut cake rectum". Very heavy infections may also lead to cachexia, dehydration, and even death. The parasite does not have a tissue migrating phase and eosinophilia is usually mild or absent.

Diagnosis. A diagnosis of trichuriasis is made by identifying the characteristic barrel-shaped ova in feces. As with hookworm infections, a direct correlation exists between worm burden and the occurence of clinical symptoms. Heavy worm burdens (> 30,000 eggs/gm. feces) consistently produce symptoms.[20,21] The adult whipworm is rarely observed in feces, except after vermifugation. With very heavy infections they may be seen on prolapsed rectum or at sigmoidoscopy.

Treatment. Mebendazole is the drug of choice for trichuriasis. Numerous clinical evaluations of the efficacy of mebendazole in trichuriasis indicate that egg reduction and cure rates with a three-day treatment schedule have ranged from 85% to 100% and 59% to 100%, respectively.[9,22-29] Transient abdominal pain and diarrhea are the only reported side effects and are uncommon. Hexylresorcinol administered as a high retention enema has been employed in the past with some success.[5,7] The potential side effects, the inconvenience of the procedure, the lack of success unless properly performed, and the frequent need for multiple treatments are disadvantages of therapy with hexylresorcinol enemas.

V. Hookworm Infection

Life cycle. *Necator americanus* is the only widely distributed hookworm in the southern United States. The adult worms measure about 1 cm in length and live in the small intestine, primarily at the level of the jejunum. They attach to the intestinal mucosa with oral cutting plates and suck blood from their host. Each fertilized female *Necator* discharges daily about 7,000 eggs which appear in the feces in a two to eight cell stage of division. On appropriate soil and under favorable environmental conditions, larvae hatch from the eggs and develop into infective filariform larvae within 6 to 12 days. Human infection occurs when infective larvae come in contact with skin that permits their penetration. The usual but not ex-

clusive site of entry is the bare foot. After penetration, the larvae migrate to cutaneous blood vessels. They are carried in the bloodstream to the lungs, break out of the pulmonary capillaries, enter the alveoli, migrate up the respiratory tract to the pharynx, and are swallowed. They ultimately reach the small intestine, mature into adults and attach to the intestinal mucosa. Eggs appear in the feces five to eight weeks after skin penetration. The average life span is two to six years although worms have been known to survive up to 15 years.

Clinical manifestations. The clinical features of hookworm infection vary with the stage of an infection as well as the intensity of the worm burden. Primary skin penetration is associated with very little reaction but multiple re-infections may result in a localized, intensely pruritic, papulovesicular dermatitis at the site of penetration of the infective larvae ("ground itch" or "dew itch"). The migration of larvae through the lungs usually causes no symptoms. Occasionally, a bronchitis or pneumonia characterized by fever, cough, tracheal or bronchial irritation, and marked peripheral eosinophilia occurs about one week after skin penetration in sensitized individuals or if a considerable number of larvae are migrating through the lungs. When a patient presents with Loeffler's syndrome, a history of "ground itch" should be sought.

Most established hookworm infections are light and are not associated with symptoms. Moderate and heavy worm burdens may produce disease, i.e., iron deficiency anemia secondary to chronic blood loss. The degree of anemia depends upon the iron reserves of the patient, the iron content of the diet, and the intensity and duration of an infection. The clinical manifestations of hookworm disease are those of iron deficiency anemia and include pallor, lassitude, easy fatigability, and dyspnea on exertion. Extreme degrees of anemia may be associated with congestive heart failure. There may be growth failure in children. Occult blood in the stools and iron deficiency anemia are the predominant laboratory abnormalities. The serum albumin may be decreased in patients with very heavy worm burdens. Peripheral eosinophilia (5 to 20%) is present early in an intestinal infection but it may subside with time.

Table 3

COMPARISON CHART OF COMMON ROUNDWORM INFECTIONS

Parasite	Source of infection	Portal of entry	Habitat of adult parasite	Larval migration through the lungs	Most common clinical symptoms	Eosinophilia*	Complications of severe infection
Ascaris lumbricoides	Infective eggs in polluted soil	Mouth	Small intestine; unattached	Yes	Abdominal discomfort	Moderate to marked when larvae are migrating through the lungs; mild and occasionally absent in long standing infections	Intestinal obstruction, intestinal perforation, bile duct or pancreatic duct obstruction
Necator americanus	Infective larvae in polluted soil	Penetration of skin	Small intestine; attached	Yes	Iron deficiency anemia	Mild to moderate	Congestive heart failure; growth retardation, hypoproteinemia
Strongyloides stercoralis	Infective larvae in polluted soil, autoinfection	Penetration of skin	Embedded in wall of upper small intestine	Yes	Abdominal discomfort, diarrhea	Moderate to marked	Malabsorption syndrome, dysentery, hyperinfection
Trichuris trichiura	Infective eggs in polluted soil	Mouth	Large intestine, especially cecum; attached	No	Abdominal discomfort	Mild to absent	Chronic dysentery, rectal prolapse
Enterobius vermicularis	Infective eggs on perianal skin or fomites	Mouth	Large intestine, especially cecum; unattached	No	Anal pruritus	Absent	Vaginitis, granuloma of uterus, fallopian tube or peritoneal cavity

*Mild = 5 to 10 per cent; moderate = 10 to 20 per cent; marked = greater than 20 per cent.

Table 3 is a comparison chart of the roundworm infections of the gastrointestinal tract discussed in this report.

Diagnosis. A diagnosis of hookworm infection is made by finding the characteristic ova in feces. The distinction between an asymptomatic infection with a few worms and hookworm disease due to a heavy worm burden can be determined by various egg counting techniques.[30-32] Egg counts greater than 2,000/gm of feces in women and children and greater than 5,000/gm in men are associated with anemia.[33] Direct fecal smears will detect egg counts greater than 1200 eggs/gm feces.[34] In general, an infection is likely to be associated with anemia if five or more eggs are found per low power microscopic field in a standard fecal smear.[5] Hookworm larvae are not found in fresh stool specimens. However, if a stool sample is allowed to stand at room temperature for several days, the eggs may liberate rhabditiform larvae which are readily mistaken for strongyloides larvae. This problem is avoided by examining fresh stool specimens.

Treatment. Mebendazole is the drug of choice for *Necator* infections. A three-day course of treatment cures 95% of infections and reduces the worm burden in the remainder.[22-24,35] Mebendazole is poorly absorbed and does not appear to have any serious side effects. Pyrantel pamoate, bephenium hydroxynaphthoate, and tetrachloroethylene are alternate, less effective therapeutic agents.[36-39] Tetrachloroethylene has been used for years because it is very cheap. A single course of treatment cures approximately 80% of patients with *Necator* infections and reduces the worm burden in the remainder. Its principal side effects are nausea and vomiting. In most areas of the United States tetrachloroethylene is commercially available only as a veterinary compound. However, USP tetrachloroethylene that comes in 0.5 ml and 1 ml gelatin capsules for veterinary use can be prescribed if necessary.[7]

Oral iron therapy in addition to an anthelmintic is indicated if hookworm infection is associated with iron deficiency anemia. The dose for adults is 60 mg of elemental ferrous iron (300 mg of ferrous sulfate) given between meals three times a day. For children 2 mg of elemental iron/kg body weight per dose is administered orally on a similar schedule.

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The Management of Gynecologic Malignancy at the University of Kentucky Medical Center

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This article presents the diagnostic and treatment regimens utilized for the major gynecologic malignancies at the University of Kentucky Medical Center. The therapy of cervical, endometrial, ovarian, and vulvar cancer is discussed.

THE Gynecologic Oncology Service at the University of Kentucky Medical Center was established in 1966. Since that time, increasing numbers of patients with various types of gynecologic cancer have been referred to this institution for evaluation and treatment (Table 1). Concomitant with the increase in numbers of patients treated, has been a proliferation of knowledge concerning the optimal management for these malignancies. The following report was prepared in order to summarize the present methods of evaluation and treatment of the major gynecologic malignancies at the University of Kentucky Medical Center. The management of cervical, endometrial, ovarian, and vulvar malignancies will be discussed.

Cancer of the Uterine Cervix

Despite the increased availability of cervical cytologic screening to patients in Kentucky, many patients with advanced cervical malignancy are being referred for treatment. During the past two years, over 200 new patients with invasive cervical cancer were evaluated at this institution and 150 of these patients had Stages II-IV disease (Table 1).

All patients referred with abnormal cervical cytology are evaluated colposcopically. Conization is performed only on those patients (1) with extensive intraepithelial carcinoma or microinvasive cancer in which the margins of epithelial abnormality is not defined, (2) in whom the squamo-columnar junction or transformation zone cannot be visualized colposcopically, or (3) in whom there is a persistent major discrepancy between cytologic and histologic findings. Conization or surgical excision of carcinoma in situ is the therapeutic procedure of choice in patients who desire further pregnancy. Hysterectomy is performed on those patients with intraepithelial carcinoma who have completed childbearing.

Patients with the histologic diagnosis of invasive cervical cancer are all examined cystoscopically and are staged according to the International Classification of Cancer of the Cervix (Table 2) under anesthesia. Although the majority of patients with invasive cervical cancer are treated with radiation therapy, selected patients with Stage I-B disease are treated with radical surgery. Approximately 20-25 patients per year are treated with radical hysterectomy and pelvic lymphadenectomy. The use of routine suprapubic cystostomy, retroperitoneal suction drainage, and retention suture closure in these patients has resulted in the reduction of urinary tract fistulae and major wound complications to less than three per cent.

Radiation therapy is given as a combination of external cobalt therapy and intracavitary radionuclide applications. In general, external therapy is given first and is followed usually by two cervico-vaginal cesium implants. Implants are performed jointly by members of the Department of Radiation Therapy and the Division of Gynecologic Oncology. After-loading sources are used uniformly and computerized dosimetry to a variety of points in the pelvis is utilized in all patients.[1]

Recurrent or persistent cervical cancer occurs in approximately 40% of treated cases.[2] With the improvement of radiation therapy, the incidence of central pelvic recurrence has decreased, however, and more patients are presenting with lateral wall or extrapelvic disease. Patients with pelvic recurrence who are satisfactory candidates for general anesthesia are explored for possible

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Table 1

GYNECOLOGIC ONCOLOGY NEW PATIENT TOTALS

University of Kentucky Medical Center

PRIMARY SITE	1972	1973	1974
Cervix (In Situ)	82	67	80
Cervix (Invasive)	95	105	103
Endometrium	18	17	28
Ovary	14	14	24
Vulva	8	6	4
Vagina	5	4	0
Trophoblastic Disease	3	7	10

curative resection, and those with distant metastases or surgically unresectable disease are treated with chemotherapy.

Endometrial Cancer

The incidence of endometrial cancer is increasing and presumably a direct association between the administration of exogenous estrogen and the subsequent development of endometrial cancer has now been established.[3,4] Although endometrial biopsy has been a useful method in establishing the diagnosis of endometrial cancer, other cytologic screening procedures such as endometrial brushing or jet washing are not used at this institution. A differential curettage taking separate samples from the endometrium and endocervix is performed on all patients.

Staging is carried out according to the International Federation of Gynecology and Obstetrics Staging System (Table 3), using both histologic grading and operative findings.

Treatment of endometrial cancer is individualized, but almost always involves a combination of radiation therapy followed by total abdominal hysterectomy and bilateral salpingo-oophorectomy. The time interval between radiation therapy and surgery has varied between four and six weeks. However, patients with adenosquamous cancers of the endometrium are operated upon immediately following completion of radiation therapy. Only those patients with Stage I disease, a small uterus, or a well differentiated adenocarcinoma with no evidence of myometrial invasion are treated by surgery alone. Likewise, irradiation alone is used only in those rare individuals who are too ill to tolerate a general anesthetic. Progesterone is not used as adjunctive therapy in primary endometrial cancer, but is given as the primary chemotherapeutic agent in patients with recurrent endometrial cancer. This drug has been shown to be particularly effective in young women with well differentiated endometrial cancer metastatic to the lungs. It is given as Provera, 1 gm intramuscularly per week, or Megestrol acetate (Megace), 160-320 mg orally per day. These drug regimens are continued for a minimum of three months or as long as the patient is in remission. Additional chemotherapeutic agents are being evaluated in patients with recurrent endometrial cancer resistant to progesterone therapy.

Ovarian Cancer

Ovarian cancer is now responsible for more deaths than any other gynecologic malignancy in the United States. Although many centers are in-

Table 2

INTERNATIONAL CLASSIFICATION OF INVASIVE CANCER OF THE CERVIX

STAGE I—Carcinoma strictly confined to the cervix

Stage I-A—Microinvasive carcinoma

Stage I-B—All other cases of Stage I. Occult cancer should be marked "occ".

STAGE II—The carcinoma extends beyond the cervix, but has not extended to the pelvic wall. The carcinoma involves the vagina, but not the lower third.

Stage II-A—No obvious parametrial involvement

Stage II-B—Obvious parametrial involvement

STAGE III—The carcinoma has extended to the pelvic wall. The tumor involves the lower third of the vagina. All cases of hydronephrosis or nonfunction of the kidney

Stage III-A—No extension to the pelvic wall

Stage III-B—Extension to the pelvic wall and/or hydronephrosis or nonfunction of the kidney

STAGE IV—The carcinoma has extended beyond the true pelvis or has clinically involved the mucosa of the bladder or rectum

Stage IV-A—Spread to bladder or rectal mucosa

Stage IV-B—Spread to distant organs

Table 3

INTERNATIONAL CLASSIFICATION OF ENDOMETRIAL CANCER

STAGE I—The carcinoma is confined to the corpus

Stage I-A—The length of the uterine cavity is 8 cm or less.

Stage I-B—The length of the uterine cavity is more than 8 cm.

Stage I cases of adenocarcinoma are histologically subdivided:

G-1—well differentiated tumors

G-2—moderately differentiated tumors with partly solid areas

G-3—predominantly solid or entirely undifferentiated carcinomas

STAGE II—The carcinoma involves the corpus and cervix.

STAGE III—The carcinoma extends outside the corpus, but not outside the true pelvis.

STAGE IV—The carcinoma involves the bladder or rectum or extends outside the pelvis.

volved in research concerning immunodiagnostic methods for ovarian cancer, pelvic examination is still the most common diagnostic method for this malignancy. Too often, patients are operated upon for an undiagnosed pelvic mass and far advanced ovarian cancer is encountered. In this regard, several diagnostic and therapeutic procedures should be performed at the time of initial surgery. First, careful inspection and palpation of the upper abdomen including the surface of the diaphragm and the para-aortic lymph nodes should be performed in order to adequately define sites of metastases. Biopsies of the tumor or clinically suspicious nodes should be taken and the upper abdomen and pelvis should be washed with saline. These washings are sent for cytologic examination and may be positive for tumor cells in the absence of visible or palpable disease.

At the University of Kentucky Medical Center, the following therapeutic approach is followed for ovarian tumors of epithelial origin. First, as much of the primary tumor is surgically excised as is possible. A total abdominal hysterectomy and bilateral salpingo-oophorectomy and omentectomy are performed. Only in the rare case of a young patient with a Stage I-A (Table 4) well differentiated mucinous cystadenocarcinoma, is unilateral adnexal surgery considered. Following surgery, adjunctive therapy is administered according to the size and location of residual tumor. If there is no residual disease or if residual pelvic malignancy is less than 2 cm in diameter, whole abdominal radiation therapy is given. If there is evidence of Stage III disease or if residual pelvic tumor is greater than 2 cm in diameter, chemotherapy is the treatment of choice. Single agent therapy with Melphalan, 0.2 mg/kg/day orally for five days is repeated at four-week intervals, providing there is no evidence of bone marrow or gastrointestinal toxicity.[6] Twelve courses of this drug regimen are given and if there is no palpable evidence of tumor, a second look operation is performed. Recent evidence may suggest that if small areas of residual disease are present at second look operation, the patient should be continued on chemotherapy rather than being switched to radiation therapy. Piver and colleagues,[7] for example, reported that less than 10% of patients survived five years when sequential Melphalan therapy was followed by whole abdominal therapy after second look laparotomy.

Approximately one half of patients with epithelial ovarian cancer will not respond to single alkylating agent therapy. These patients have been treated with combination chemotherapy using Actinomycin-D, 5-Fluoruracil and Cytoxan.[6] This drug regimen, although highly toxic, has been associated with a significant response rate. Currently, additional single and combined chemotherapeutic agents are being evaluated in patients whose ovarian cancer is unresponsive to alkylating agents.

Vulvar Cancer

As in the other more common gynecologic malignancies, early diagnosis of vulvar cancer is of utmost importance. Small, well differentiated lesions confined to the vulva have an excellent prognosis, whereas large undifferentiated lesions involving extravulvar structures have a poor prognosis.[8] In all major series of vulvar cancer, both patient delay and physician delay are significant factors in preventing adequate therapy. It is mandatory that all non-healing ulcerative lesions of

Table 4

STAGING CLASSIFICATION FOR PRIMARY CARCINOMA OF THE OVARY

STAGE I—Growth limited to the ovaries

Stage I-A—Growth limited to one ovary; no ascites

Stage I-B—Growth limited to both ovaries; no ascites

Stage I-C—Findings of Stage I-A or Stage I-B, but with ascites present or positive peritoneal washings

STAGE II—Tumor involving one or both ovaries with pelvic extension

Stage II-A—Extension and/or metastases to the uterus and/or tubes

Stage II-B—Extension to other pelvic tissues

Stage II-C—Findings of Stage II-A or Stage II-B disease but with ascites present or positive peritoneal washings

STAGE III—Growth involving one or both ovaries with intraperitoneal metastases outside the pelvis or positive retroperitoneal nodes. Tumor limited to pelvis, but with histologically proven malignant extension to small bowel or omentum

STAGE IV—Growth involving one or both ovaries with distant metastases. If pleural effusion is present, there must be positive cytology to allot a case to Stage IV. Parenchymal liver metastases equals Stage IV.

SPECIAL CATEGORY—Unexplored cases thought to be ovarian cancer

the vulva be biopsied immediately and that patients be referred as soon as possible for definitive therapy. Colposcopy and toluidine blue staining are used to identify areas of vulvar epithelial abnormalities and excisional biopsies of suspicious areas are taken.

In more recent years, wide local excision or skinning vulvectomy has been performed for intraepithelial vulvar malignancy. The concept of "microinvasive" cancer of the vulva is presently controversial. Parker and colleagues[9] reported that vulvar lesions containing less than 5 mm of stromal invasion were not associated with nodal metastases unless there was vascular channel involvement or cellular anaplasia. In contrast, Dipaola and coworkers[10] reported that 3 of 11 cases in which the depth of tumor invasion was 5 mm or less had positive groin node metastases. At present, patients with histologic evidence of invasion of the vulvar stroma are being treated by radical vulvectomy and bilateral groin dissection. Pelvic lymphadenectomy is performed in those cases in which the groin nodes are positive or when there is involvement of the clitoris or urethra. Irradiation is not being used as primary therapy for vulvar cancer, but has been used in combination with surgery for lesions extending up the vaginal canal.

As at other centers, the excellence of therapy in Gynecologic Oncology depends to a large extent on the close cooperation between the referring physician, gynecologic oncologist, radiation oncologist, and pathologist. Although treatment guidelines can be defined for the major types of gynecologic cancer, therapy must be individualized to achieve the highest cure rate for each patient.

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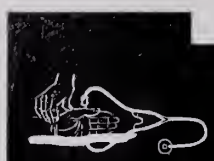
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MEDICAL PROGRESS



^{131}I-19-Iodocholesterol Scanning of the Adrenal: A New Tool for the Clinician

RODNEY A. SKAGGS* AND WILLIAM W. WINTERNITZ, M.D.**

CONSIDERABLE interest has developed over the past several years in the development of a technique whereby the adrenal glands in humans might be visualized noninvasively. As early as 1968, workers at the University of Michigan were attempting to visualize the adrenals of dogs *in vivo* using radioiodinated o', p-DDD[1] and several labelled steroids, including ^{131}I-stigmasterol. However, these early efforts were unsuccessful.

Attention subsequently focused on the development of labelled precursors of the adrenal steroids, with labelled cholesterol being the prime candidate as a useful agent. It was reasoned that, as cholesterol is the single major precursor of all of the adrenal steroids, the adrenals might be expected to take up and concentrate radioisotope-labelled cholesterol to a degree sufficient to allow imaging of the adrenals with a suitable detector, such as a scintillation photoscanner.

With the synthesis of ^{125}I-19-iodocholesterol by Counsell in 1970,[2] this hypothesis could be put to the test, and in 1971 Beierwaltes, Blair, et.al. reported the successful *in vivo* imaging of normal adrenals in dogs with the use of this substance.[3] In 1971, Beierwaltes, Liebermann, et.al. reported the first successful imaging of the adrenals in a human.[4] They reported that the adrenal glands of a patient with Cushing's syndrome had been repeatedly visualized with a rectilinear photoscanner and an Anger gamma camera following the intravenous administration of two millicuries of ^{131}I-19-iodocholesterol. The adrenals in this case appeared to concentrate the labellel cholesterol equally and they were similar in size, thus supporting the clinical impression that the patient's steroid excess was caused by bilateral adrenocortical hyperplasia rather than by a functioning unilateral adrenal tumor.

Since this initial report, ^{131}I-19-iodocholesterol has been used repeatedly both to image normal adrenal glands and to demonstrate anatomic and functional disorders of the adrenals in a variety of clinical situations.[5-9,11-13]

In 1974, Anderson, Beierwaltes, et. al. reported on the results of adrenal imaging in 100 patients at the University of Michigan.[10] Of these first 100 patients, 98 had scans which were technically suitable for interpretation. Normal adrenal glands were repeatedly visualized without difficulty, and 55 of the initial scans were interpreted as normal. Further study revealed that 39 of these 55 patients had no convincing evidence of adrenal pathology, while in 16 patients a diagnosis of hyperaldosteronism could not be ruled out, and no final diagnosis was available. Forty-three initial scans were judged to be abnormal.

Four patients with Cushing's syndrome due to bilateral cortical hyperplasia showed bilaterally increased uptake. Of six patients who were suspected of having adrenal remnants following bilateral total adrenalectomy for Cushing's syndrome, a remnant was visualized in five. In the sixth patient, who was being maintained without glucocorticoid replacement, but who showed no clinical evidence of continuing cortisol excess, there was no visualization.Three patients had Cushing's syndrome caused by a unilateral adenoma. In two of them, the adrenal harboring the tumor was visualized, while the contralateral gland (which would be expected to be atrophic) was not seen. In the third patient, neither gland was visualized. In two patients with Cushing's syndrome caused by adrenocortical carcinoma, neither gland was visualized, a result which might

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be expected with a large mass of poorly functioning neoplastic tissue, which would not concentrate the tracer substance sufficiently to be visualized, but which would produce sufficient excess cortisol to cause atrophy of the contralateral gland.

The series of 100 patients also proved the usefulness of adrenal imaging in a number of other conditions. It was used in a number of cases to confirm the diagnosis of primary aldosteronism and to demonstrate the location of the typically small aldosterone-producing tumor. Of special interest in this regard was the value of the technique in distinguishing between excess aldosterone secretion caused by unilateral tumors from cases of so-called "idiopathic" aldosteronism due to bilateral hyperplasia. The technique also proved useful in the investigation of adrenal medullary disease, having been used in several cases of pheochromocytoma to demonstrate the site of the lesion.

Radio-imaging of the adrenal glands with ^{131}I-19-iodocholesterol is a fairly new technique and is not yet widely available. However, experience to date would appear to indicate that it can be quite useful in the clinical investigation of the anatomical and functional status of the adrenals. As experience accumulates and the technique becomes more readily available, it will in all probability become a valuable tool for the practicing endocrinologist.

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GRAND ROUNDS

The University of Kentucky College of Medicine

This Journal feature will be presented alternately by the University of Louisville and the University of Kentucky Departments of Medicine and Departments of Surgery. We hope to have these features revolve around subjects of immediate practical interest to the practicing physician; and, for those of us not able to attend grand rounds in the teaching centers as often as we might, we hope this will represent a bit of a refresher course.

Obstruction of the Bile Ducts

John G. Banwell, M.D.*

Case Presentation

C. J. was a 65-year-old white male from Mt. Sterling, and was first admitted to the UKMC on August 13, 1974. His diagnosis was recurrent pulmonary emboli, steatorrhea, and weight loss with development of progressive jaundice.

This patient was on disability and initially presented with a three-week history of intermittent episodes of smothering. Physical exam revealed a cachectic man in mild respiratory distress with BP 98/70, P=100, RR = 24, afebrile, height 5′6″, weight 131 lbs. There was no JVD; patient was using accessory muscles of respiration. Chest revealed increased anteroposterior (AP) diameter with generalized decreased breath sounds. Cardiac exam revealed no murmurs or gallops. There was no significant adenopathy or organomegaly. The patient had ankle edema and there was tenderness to deep palpation without cords noted in the right calf.

On the second hospital day the patient developed dull right chest pain and became acute dyspneic. Chest x-ray showed development of infiltrate, right base. An EKG showed RVH with acute strain pattern; blood gases revealed PO_2 decreasing from 66 on admission to 50 on 4PO_2 and lung scan was consistent with multiple pulmonary emboli. The patient gradually improved with anticoagulation. It was noted that the patient was having persistent foul-smelling bulky stools, as many as 10-15 per day. The patient stated that he had intermittently had diarrhea for four to five years prior to admission and had lost about 40 lbs over this time. He had been told that he had ulcerative colitis several years prior to admission.

Evaluation of the diarrhea included Hct. = 41, MCV = 98, Ca = 3.3, T_4 = 6.6, bilirubin = 0.6/0.4, SGOT = 29, alkaline phosphatase = 139, total protein = 4.7, albumin = 1.7, SerFe = 15, IBC = 150, FBS = 206m folate level = 14 mg/ml normal Schilling test (10%) Dxylose absorption 5 hr. urine = 2.5 gms, 19 hr. urine = 0.5 gms, 2 hr. serum = 31.8mg%, multiple stool for O+P, anteric pathogens—negative, 72 hr. stool fat = 40 gm fat/24 hr. Flat plate of abd = nonspecific without pancreatic calcifications. UGI, BE were within normal limits. SBFT revealed some dilatation with large regular folds "suggestive of non-tropical sprue." OCG was late to visualize but revealed a somewhat large gallbladder without stones. Further workup was interrupted by an episode of GI bleeding and hemoptysis related to a PT of 120/30 on only 2.5 mgm Coumadin per day. Bleeding stopped with Vitamin K reversal but patient subsequently developed another episode of dyspnea. Venograms revealed bilateral veno-occlusive thrombosis up into the iliac veins and pulmonary angios revealed pulmonary emboli. An IVC umbrella was placed and the patient was gradually reanticoagulated. The patient's diarrhea spontaneously abated to the point where he was having only three to four loose bowel movements per day. His appetite improved and he began to gain weight. A small bowel biopsy could not be done because of the required anticoagulation. It was elected to discharge the patient on September 19, 1974, and to follow him in the clinic.

He did well over several months with a weight gain of up to 161 lbs, and no exacerbation of

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diarrhea. In December, 1974, the frequency and amount of stool increased and the patient gradually began to lose weight again. He was to have been admitted for further evaluation after the holidays when he presented on December 23 with a two-week history of anorexia, malaise, and progressively increased jaundice associated with light-colored stools and dark urine. It was discovered from the family that the patient had several such episodes of jaundice over the year prior to admission.

Physical Exam: BP = 110/70, Hr = 84, RR 12, Temp. = 98.6 F. The sclera were icteric. The patient had JVD up 2-3 cm at 45. There was a loud S_4. Chest exam revealed no rales, rhonchi, or rubs. The liver was enlarged at 14 cm span and down 1-2 FB and firm. There was 3+ edema in the lower extremities without obvious phlebitis. Bilirubin was 5.0/4.0, alkaline phosphatase = 514, SGOT = 55, PT was 143/12, Hct = 22, guiac positive, CEA = 17.2 ng/ml. A liver scan showed enlarged liver, non-homogenous pattern suggestive of metastatic disease. The anticoagulation was reversed with Vitamin K. A liver biopsy was done. The patient deteriorated over the next 72 hours becoming hypotensive and increasingly more lethargic and disoriented. The patient became acidotic and oliguric. Antibiotic therapy with Clindamycin, Gentamycin, and Nafcillin as well as intubation and pressors failed to maintain life support and the patient expired on December 31, 1974. A blood culture drawn on December 29 was reported as positive for *E. Coli* and *Enterobacter colacae*. An autopsy was performed.

Discussion

We can use this patient to illustrate several classic adages about obstruction of the common bile duct and the causes which may bring this about. First, the painless onset of steatorrhea and diarrhea probably occurs in some 15-20% of persons with pancreatic neoplasms; the thromboembolic complications are well recognized and intermittent jaundice, although we never actually documented it in this patient, occurs with lesions, such as ampullary carcinoma, that are liable to undergo necrosis. In addition, the episode of GI bleeding in association with anticoagulant therapy should always make us search for a local lesion in the GI tract before attributing it to anticoagulation therapy alone. The patient exhibited liver function tests compatible with obstruction and death occurred from the classic situation of superimposed ascending cholangitis, which I will discuss later in this talk.

The tragedy of it all, of course, is that an ampullary carcinoma represents an operable and sometimes curable form of pancreatic neoplasm. Surveys from the Mayo and Lahey Clinics indicate that this is not only operable but it is also curable in instances where it is diagnosed correctly.

The incidence of pancreatic neoplasms is increasing at the present time. We most often diagnose them in the situation where painless jaundice or even painful jaundice have occurred. However, few of these are resectable at operation and even tumors detected with less in the way of symptoms of jaundice and pain are also irresectable and so we are still very much in a situation of being dependent on thinking of the problem in a patient with weight loss and abdominal pain and of then trying, hopefully, in the next few years, to evolve methods of detection that are better than we have at the present time. Perhaps, ultrasound may be one of these methods. What I want to do in this talk is to discuss some aspects of the patient who has obstructive jaundice and then deal with problems about the complications of ascending cholangitis which represents a situation where the internist has a major role in diagnosis and initial treatment, but the problem demands surgical relief.

You recall that extrahepatic obstruction is one of the three major causes of jaundice which are emphasized in early medical school teaching. To distinguish between pre-hepatic jaundice, hepatic jaundice, and obstructive jaundice is not too difficult when we are faced with purely one of these causes. Also, we can often make a diagnosis of biliary obstruction and then think of the differential diagnosis of possible lesions which cause obstruction. We are guided in this effort by the patient's symptoms: jaundice with dark urine, pruritis (when bile salt retention is significant), and features of hepatomegaly. The classic law of Courvoisière states that if you can feel the gallbladder in the jaundiced patient, then this is most likely attributable to a tumor involving the main biliary duct; whereas, if the gallbladder is impalpable, it is perhaps more likely to be due to the fact that the gallbladder is scarred and small due to chronic cholecystitis. This is a general guide that is not always of help. The gallbladder does not always reach the anterior surface of the abdominal wall even when it is enlarged. One

would guess that probably in no more than 10 to 20% of the patients is the gallbladder ever palpable in association with the type of lesion that this patient had. Clinical diagnosis has never completely helped and we have always had recourse to biochemical methods of evaluating the difference between hepatocellular damage and obstructive lesions of the bile duct.

In this evaluation we rely on elevated serum levels of conjugated bilirubin and alkaline phosphatase usually found in the presence of very limited evidence of hepatocellular damage as shown by serum transaminase elevation. Unfortunately, the presence of conjugated bilirubin in the circulation may occur as much from hepatocellular disease with associated cholestatis as it does from major extrahepatic bile duct obstruction. The presence of a raised alkaline phosphatase is a major guide provided one can be sure that it does not derive from the intestinal or skeletal system. One can make use of the fact that alkaline phosphatase of liver origin is heat stable to draw this distinction. However, I believe this is never absolute and if the alkakine phosphatase is heat stable (i.e., of liver origin) it is only relative, and, therefore, only very rarely can one be totally certain that an alkaline phosphatase elevated five times is derived from the bile duct epithelium. It is useful, therefore, to have an additional biochemical marker of which 5′ nucleotidase, leucine aminopeptidase, or gamma glutamyl-peptidase are probably the three best to indicate that the alkaline phosphatase elevations are, indeed, associated with a similar elevation in another enzyme that is derived from the bile duct. An elevation of the 5′ nucleotidase is the best in this regard in my opinion. Gamma glutamyl-peptidase is probably too sensitive because even mild changes in hepatocellular disease can cause its elevation. Thus, if one is faced with a dilemma, a 5′ neucleotidase estimational to confirm that alkaline phosphatase elevation is due to bile duct obstruction may be helpful.

However, one is faced with the question of whether there is a bile duct obstruction in association with severe hepatocellular disease. This problem occurs in a variety of situations which I shall not discuss today where elevation of serum bilirubin results from a transportation defect across the hepatocyte (a cholestatic lesion) into the bile canniculus. Some of these conditions are well known to you in association with drug-induced hepatitis and certain types of viral hepatitis. The condition that mainly troubles us on the ward service is the association of apparent bile duct obstruction as evidenced by high alkaline phosphatase and high bilirubin levels in the patient with alcoholic hepatitis and sometimes also in the patient with Hodgkin's disease. The incidence of cholestasis with alcoholic hepatitis is extremely common and it may persist for weeks even in the recovery phase of the hepatitic process. It can be visualized on liver biopsy and if one takes a large number of patients with alcoholic hepatitis, very few of them turn out to have an obstruction of the extrahepatic duct that requires surgical exploration. The second point that needs to be emphasized in this group of patients is that even if the patient does have extrahepatic obstruction, as well as alcoholic hepatitis, the presence of the acute alcoholic hepatitis really precludes surgical intervention in the acute phase. The third point that needs to be remembered is that if there is obstruction of the extrahepatic duct, it is some six to eight weeks before one develops changes of hepatic fibrosis and early features of biliary cirrhosis that become irreversible so that there is always a favorable time on our side to favor a waiting approach. There are, however, some ductular lesions that are associated with intrahepatic lesions: primary biliary cirrhosis and sclerosing cholangitis, for example, which are difficult to distinguish from extrahepatic obstruction. In these diseases, one must carefully define the characteristics of the disease, utilize the evidence of associated immune disorders, particularly Sjogren's disease, thyroiditis, rheumatoid arthritis, and ulcerative colitis, as well as antimitochondrial antibody tests. This test will, in most instances, provide a definitive diagnosis of primary biliary cirrhosis.

A differential diagnosis with which we are often faced is the problem of a rare malignant obstruction high up at the bifurcation of the bile duct system in which the same clinical presentation as extrahepatic obstruction occurs (pruritus, jaundice, and liver enlargement). These patients may undergo laparotomy and are found to have no apparent cause for their obstruction. This problem is one of the major indications in most people's minds for the use of percutaneous cholangiography prior to operative intervention in order to be able to exclude lesions high up in the biliary tract which are not within easy palpation range of the surgeon's hands. I think these cases

indicate that we should try to emphasize the need for percutaneous cholangiography using the new Chiba needle in patients who are going to surgery for relief of extrahepatic obstruction where the exact site of obstruction is unknown from prior studies.

The bile duct secretory system is a much more subtle one than we have previously recognized in its reaction to obstruction. The driving force for fluid down the bile duct system comes from the active transport of bilirubin and bile salts; very little in the way of fluid movement occurs in response to hydrostatic or osmotic influence. There are other driving forces to secretion of fluid, as well: probably an active sodium transport system and also a secretion of fluid and electrolytes at the level of the ducts in response to secretin. Bile salts and secretin represent the major choleretic stimuli to fluid output into the bile duct system. At the other end of the bile duct is a true sphincter—the sphincter of Oddi which has a highly complex muscle structure and almost always has a persistent ampullar or area of junction between pancreatic and biliary tree. This is lined by true muscle and would be associated with pain in the passage of a large stone through that region. The rest of the bile duct system is not lined by muscle and has no contractile powers at all. The control of the volume of this system is largely a response to passive filling of the gallbladder and the opening of the sphincter at the duodenal end. There appears to be a reciprocal neural relationship between opening and closing of these two structures and the driving force of fluid from the liver. This must be well integrated in the normal person. Occasionally it appears to get "out of whack" because there are diseases of gross dilatation of the bile duct system called Caroli's disease, which are not associated with any obstruction where fluid secretion may be excessive. But we know very little about the mechanisms or how these occur.

This leads us into the problems that develop when obstruction occurs to the extrahepatic duct. In the normal state bile is sterile but in the presence of bile obstruction which is related to cholelithiasis, and in particular in this man with ampullary carcinoma, as well, an overgrowth with a variety of intestinal bacterial flora occurs. The levels of overgrowth indicate very high levels of bacterial organisms occupying the biliary tract, both anerobic and aerobic. Total bile duct obstruction in association with carcinoma is less usually associated with bacterial overgrowth.

Once bacterial overgrowth occurs in the biliary tract, we are faced with the possibility of developing cholangitis and this may be of varying severity. In early acute cholecystitis with cholelithiasis, there may be local inflammation adjacent to the gallbladder with involvement of the common bile duct or the right hepatic duct with a para gallbladder inflammatory process. This type of lesion is not usually associated with bacterial involvement of the bile ducts, but may be associated with transient jaundice or transient obstruction. It is relieved by cholecystectomy. However, there are other situations representing increasing evidence of bacterial involvement of the biliary tract. In these, bacteria in the bile can be cultured at surgery, associated with sludging of bile probably as a result of a deconjugation of bile salts from bacterial overgrowth and the precipitation out of unconjugated bile salts, as well as perhaps, other changes in biliary phospholipids. There may be a total suppuration or presence of pus in the biliary tree which may very readily lead to the development of septicemia, bacteremia, and shock, as well as the development of hepatic abscesses.

These problems are drawn to our attention in the classic triad of symptoms wherein the patient with gallbladder disease or choledocholithiasis where gallstones are in the bile ducts themselves, have intermittent pain in the right upper quadrant, intermittent jaundice associated with intermittent fever and chills (Charcot's triad). This association should always alert us, particularly if associated with tenderness over the liver, to the diagnosis of ascending cholangitis. The awareness of this is particularly important in elderly people where mental confusion and disorientation may preclude the patient describing to you their symptoms. If one remembers that probably by the age of 70 something of the order of 50 to 60% of the population have gallstones, it comes as no surprise that the majority of people we see with hepatic pyemia or cholangitis represents patients with gallstone disease, few of them with malignant disease, and many in older age. One should be aware of a patient with the scarred abdomen, the person who has had multiple operative interventions for gallbladder disease who subsequently has been left with bile duct strictures. This is another common source of partial bile duct obstruction and the predisposing conditions for attacks of ascending cholangitis.

In management of these problems, it should be emphasized that of all causes of liver abscess that we now see, dissemination from the bile duct systems is by far the commonest cause. Other causes of intra-abdominal sepsis only occasionally represent sources of liver abscess formation. Nor does arterial dissemination other than through situation like staphylococcal septicemia or subacute bacterial endocarditis occur frequently.

Detection of liver abscesses by liver scan is obviously easy when the lesions are large. They are far less easy in relation to biliary tract disease where multiple small abscesses occur and of a size that is not readily visible on liver scan.

We know little about the bacterial organisms and their sensitivity in these patients. We have taken shelter in the knowledge that in almost all instances this problem is one to be dealt with by urgent surgical relief of the bile duct obstruction. However, I think that survival of the septicemic patient is often dependent on the initial utilization of the correct antibiotics and supportive care. We know little about what type of antibiotic regimen to use. There have been few studies on the optimal regimens to use in either man or experimental animals. We do not know how the organisms gain access through the biliary system. We assume that bacteremia is due to raised pressure in the duct as this can be shown experimentally but it may depend upon changes in invasiveness in the organisms which colonize the biliary tract.

As a general rule, several types of antibiotic regimens are utilized. Gentamycin with high dose Penicillin, Kanamycin, Clindamycin, and Ampicillin have all proven useful. Most patients respond to these, enabling them to be subsequently treated surgically. The importance of antibiotics in acute cholangitis is emphasized further by the rare group of non-obstructive bile duct diseases (Caroli's disease) where surgical treatment is extremely hazardous and long-term or intermittent use of antibiotics may have considerable importance.

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FOR LONG-TERM CONTROL OF HYPERTENSION*

Serum K^+ and BUN should be checked periodically. (See Warnings Section.)



Before prescribing, see complete prescribing information in SK&F literature or *PDR*. The following is a brief summary.

* **Warning**
This fixed combination drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

***Indications:** *Edema:* That associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. *Mild to moderate hypertension:* Usefulness of the triamterene component is limited to its potassium-sparing effect.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Anti hypertensive effects may be enhanced in post sympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered) digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness dizziness, headache, dry mouth; anaphylaxis rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea constipation, other gastrointestinal disturbances Necrotizing vasculitis, paresthesias, icterus pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone

Supplied: Bottles of 100 capsules; in Single Unit Packages of 100 (intended for institutional use only).

SK&F Co., Carolina, P.R. 00630
Subsidiary of SmithKline Corporation

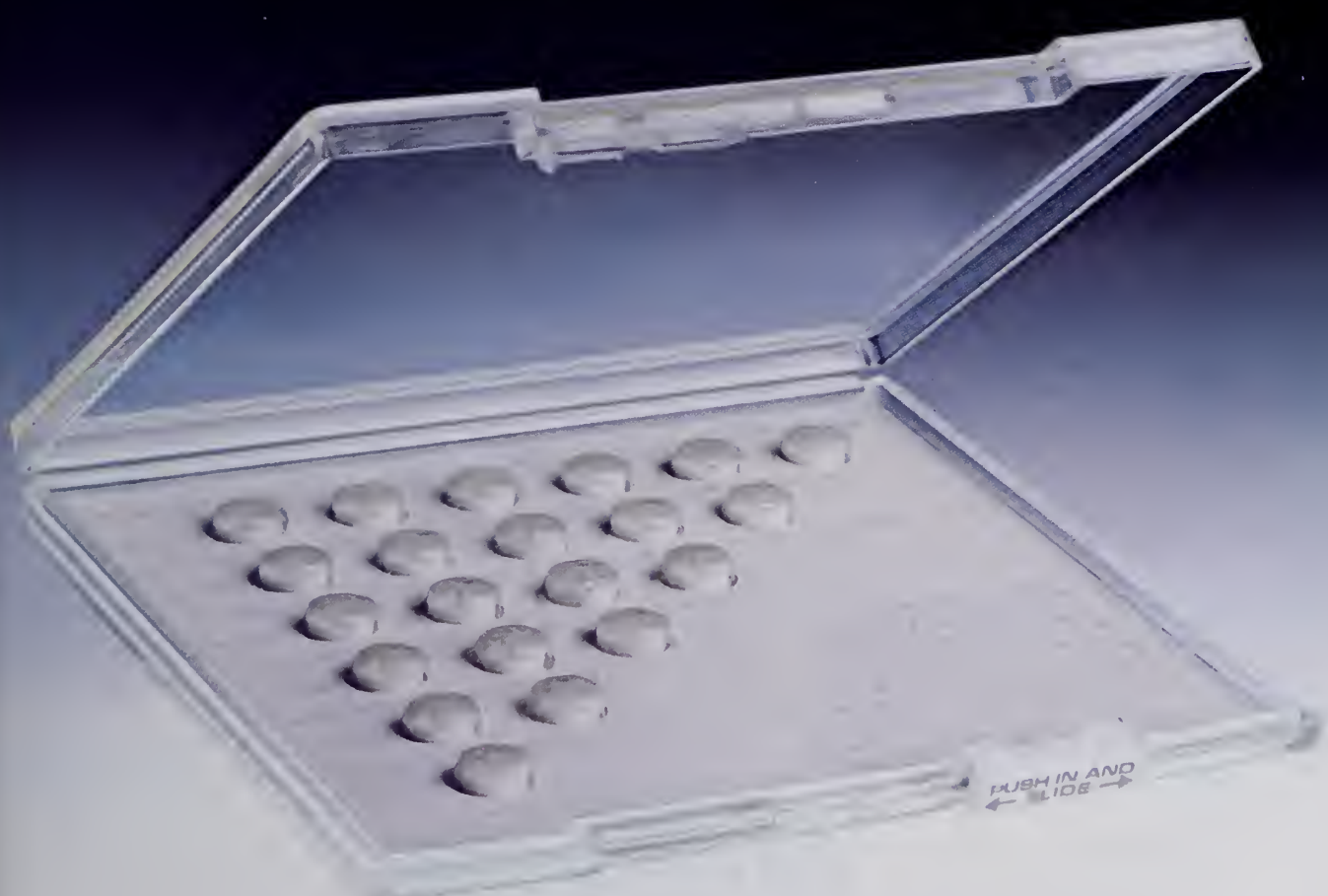
Upjohn

The Upjohn Company, Kalamazoo, Michigan 49001

Medrol® 4 mg Dosepak*

methylprednisolone, Upjohn

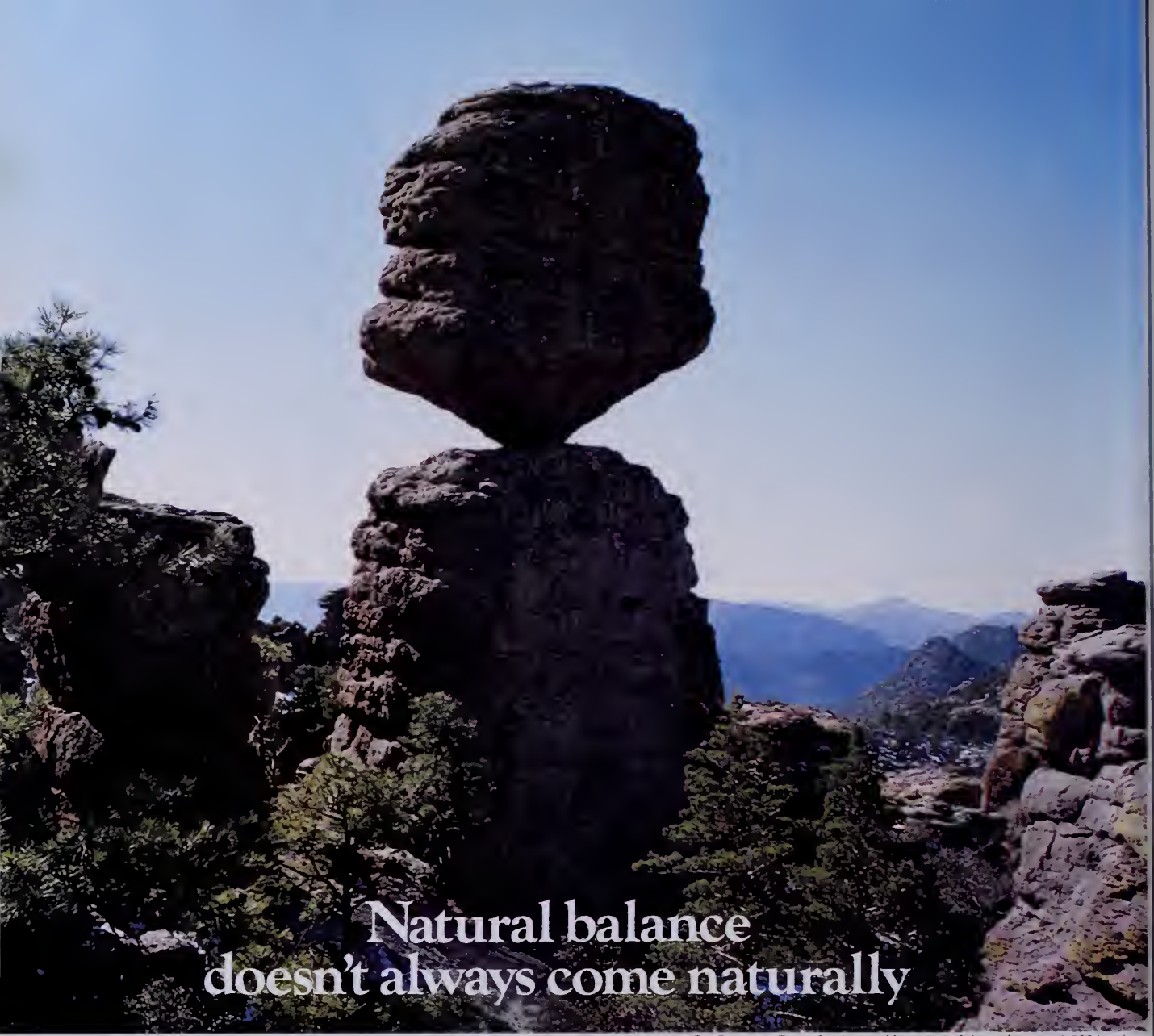
The explicit printed dosage instructions that accompany each Dosepak make it easy for the patient to understand and follow the dosage regimen.



*Trademark

4837-4

©1976 The Upjohn Company



Big Balanced Rock, Chiricahua Mountains, Arizona (approx 1,000 tons)

□ Found useful in the management of vertigo* associated with diseases affecting the vestibular system.
□ Can relieve nausea and vomiting often associated with vertigo.*
□ Usual adult dosage for Antivert/25 for vertigo:* one tablet t.i.d.
□ Also available as Antivert (meclizine HCl) 12.5 mg. scored tablets, for dosage convenience and flexibility.
□ Antivert/25 (meclizine HCl) 25 mg. *Chewable* Tablets for nausea, vomiting and dizziness associated with motion sickness.

BRIEF SUMMARY OF PRESCRIBING INFORMATION

*INDICATIONS. Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during p nancy or to women who may become pregnant is contraindicated in view of teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gesta has produced cleft palate in the offspring. Limited studies using doses of over 100 r kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft pal Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hy sensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, pati should be warned of this possibility and cautioned against driving a car or opera dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in chilc have not been done; therefore, usage is not recommended in the pediatric age grou

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blu vision have been reported.

More detailed professional information available on request.

ROERIG Pfizer
A division of Pfizer Pharmaceut
New York, New York 10017

Antivert®/25
(meclizine HCl) 25 mg. Tablets
for vertigo*

EDITORIAL

Movin' On

ALL of us are surrounded by change, from birth to death, some of it our own making, but much of it beyond our control. As we attempt to live relatively stable lives in the midst of what seems to be a progressively accelerating rate of change in the society around us, we may become increasingly unsettled and irritable. Who and where we were seems to become less important. Who and where we are to be seems to be sometimes more a matter of chance than of individual determination. Alvin Toffler dealt with this at some length (although not very clearly, I believe) in his book *Future Shock*.

In the field of medicine we are not only not remote from this flowing sea of change; we are in one of the fields immersed most thoroughly in it. Some examples:

Think for a moment of the alterations that have occurred in the management of arteriosclerotic heart disease. Within a very short time coronary artery bypass surgery has come to be (not without objection from some quarters) the treatment of choice for a significant number of patients with angina pectoris. It is probable that only the complexity of the treatment has prevented its application to thousands more patients than have already been operated upon. To say that this represents a major change in the optimum management of a common and important disease entity, is an understatement.

Consider the recent acceptance of aspiration in the treatment of cystic lesions of the breast, a treatment thought unwise just a decade or so ago. Aspiration now has to be considered as a first step in the therapy of any single breast lesion, either for deflation if it is a cystic lesion or for biopsy if it is a solid tumor. Also in the same field, our clinical approach to breast cancer has been modified by the advent of statistical data indicating that the long term results from both a well performed modified radical mastectomy and a classical radical mastectomy are very close to identical. Surgeons have thus had to learn another new technical procedure.

Within the past year the accepted type of aftercare for carcinoma of the breast has changed even more. The recently available statistical studies of postoperative radiation have pretty clearly indicated that there is no increased survival after radiation, whether or not the nodes are positive at the time of resection. In addition, the use of postoperative prophylactic chemotherapy has been strongly and effectively advocated by Bonadonna et al., so that cyclophosphamide, methotrexate and fluorouracil should be considered for postoperative use in any patient with positive axillary nodes. This, of course, will necessitate the development of many more medical and surgical oncologists than we now have available.

Even more recently the use of the estrogen-receptor factor has been recommended, with a pretty logical subsequent recommendation that treatment of E-R positive tumors should be supplemented with oophorectomy and adrenalectomy rather promptly. Since the E-R determination and the subsequent surgery are expensive, time-consuming, and technically difficult, this advance may produce many complications, much expense, and definitely increased surgical morbidity. The use of Nafoxidine, an antiestrogen medication, is another mode of therapy that may be of some help in the E-R positive group, after endocrine-ablation has been accomplished.

To move away from the shifting sands surrounding the therapy of breast lesions, we can mention briefly the onrush of interest in computerized axial tomography. These instruments make available noninvasive diagnostic studies of the brain, the chest, the retroperitoneal space, and other areas of the body previously difficult to visualize, but they cost over half a million dollars each, and are being promoted in some instances with an almost evangelical fervor. That we as clinicians need factual guidelines to help assure proper usage of these fascinating instruments, is obvious.

Thus, with just a few of the instances that come readily to mind, it can be seen that advances in the

art and science of medicine push us, willy-nilly, from the comfortable plateaus of knowledge to which we ascended in medical school, and that we must subscribe to the concept of continuing medical education or fall rapidly and dismally behind our peers. It also seems obvious that some of the major changes in recent years tend to emphasize the role of the urban medical center—the heart surgery teams, the body scanners, and the complexities of modern medical oncology, all would seem to be best based in a medical center. (It must be added that many other advances—fiberoptic endoscopy, the drug therapy of hypertension, and total prosthetic hip replacement, to name a few—are quite suited to application at a well-staffed community hospital level.)

In sum, the field of medicine remains a happy hunting ground for the intellectually active, and there can be no reassurance that any of today's therapy will remain applicable tomorrow. Every year, it seems, we can do more for our patients, with perhaps some increased benefit accruing to them; whether they, or their alter ego, the body politic, will be willing to stand the cost of all these things remains to be seen. In a field such as this, where benefits and costs are both capable of infinite expansion, it would appear that financial guidelines will need to be set by the consumers, with the providers establishing medical priorities.

WIH

Manuscript Memos

Manuscripts should be submitted in duplicate to The Journal of KMA, an original copy and one carbon, and typed with double spacing. Maximum length of an article should not exceed 4500 words; the Board of Consultants on Scientific Articles prefers that they be briefer than this when possible.

In submitting a manuscript, the author is requested to include a concise summary, not to exceed 35 words, to be used as a sub-title when the article is published in The Journal. The purpose of the summary is to create additional interest and encourage greater readership.

Footnotes and bibliographies should conform to the style of the Quarterly Cumulative Index Medicus published by the American Medical Association. This requires in the order given name of author, title of article, name of periodical, with volume, page, month —day of month if weekly—and year. The Journal of the KMA does not assume responsibility for the accuracy of references used with scientific articles.

All scientific material appearing in The Journal is reviewed by the Board of Consultants on Scientific Articles. The editors may use up to six illustrations with the essayist bearing the cost of all over three one-column halftones.

Arrangements for reprints of an article should be made directly with the publisher of The Journal. Gibbs-Inman Printing Company, 817 W. Market St., Louisville, Ky.

The bylaws of the Kentucky Medical Association provide that all scientific discussions and papers read before the KMA Annual Meeting shall be referred to the KMA Journal for consideration for publication. The bylaws further state that the editor or the associate editor may accept or reject these papers as it appears advisable and return them to the author if not considered suitable for publication.

Please mail your scientific articles to The Journal of the Kentucky Medical Association, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205.

Current Trends

The following information concerning the currently approved therapy for syphilis is published at the request of the Center for Disease Control in Atlanta. It is taken from the April 9, 1976, issue of the CDC Morbidity and Mortality Weekly Report.

Syphilis — CDC Recommended Treatment Schedules, 1976

The following recommendations were established by the Venereal Disease Control Advisory Committee after deliberation with therapy experts.

Few data have been published on the treatment of syphilis since CDC revised these recommendations in 1968. Penicillin continues to be the drug of choice for all stages of syphilis. Every effort should be made to document penicillin allergy before choosing other antibiotics because these antibiotics have been studied less extensively than penicillin. Phvsicians are cautioned to use no less than the recommended dosages of antibiotics.

EARLY SYPHILIS (primary, secondary, latent syphilis of less than 1 year's duration)

(1) Benzathine penicillin G — 2.4 million units total by intramuscular injection at a single session. *Benzathine penicillin G is the drug of choice because it provides effective treatment in a single visit.** **OR**

(2) Aqueous procaine penicillin G — 4.8 million units total: 600,000 units by intramuscular injection daily for 8 days. **OR**

(3) Procaine penicillin G in oil with 2% aluminum monostearate (PAM) — 4.8 million units total by intramuscular injection: 2.4 million units at first visit, and 1.2 million units at each of 2 subsequent visits 3 days apart. *Although PAM is used in other countries, it is no longer available in the United States.*

Patients who are allergic to penicillin:

(1) Tetracycline hydrochloride** — 500 mg 4 times a day by mouth for 15 days. **OR**

(2) Erythromycin (stearate, ethylsuccinate or base) — 500 mg 4 times a day by mouth for 15 days.

These antibiotics appear to be effective but have been evaluated less extensively than penicillin.

SYPHILIS OF MORE THAN 1 YEAR'S DURATION (latent syphilis of indeterminate or more than 1 year's duration, cardiovascular, late benign, neurosyphilis)

(1) Benzathine penicillin G — 7.2 million units total: 2.4 million units by intramuscular injecton weekly for 3 successive weeks. **OR**

(2) Aqueous procaine penicillin G — 9.0 million units total: 600.000 units by intramuscular injection daily for 15 days.

The optimal treatment schedules for syphilis of greater than 1 year's duration have been less well established than schedules for early syphilis. In general, syphilis of longer duration requires higher-dose therapy. Although therapy is recommended for established cardiovascular syphilis, there is little evidence that antibiotics reverse the pathology associated with this disease.

Cerebrospinal fluid (CSF) examination is mandatory in patients with suspected, symptomatic neurosyphilis. This examination is also desirable in other patients with syphilis of greater than 1 year's duration to exclude asymptomatic neurosyphilis.

Published studies show that a total dose of 6.0-9.0 million units of penicillin G results in a satisfactory clinical response in approximately 90% of patients with neurosyphilis. There is more published clinical experience with short-acting penicillin preparations than with benzathine penicillin G. Some clinicians prefer to hospitalize patients with neurosyphilis, particularly if the patient is symptomatic or has not responded to initial therapy. In these instances they treat patients with 12-24 million units of aqueous crystalline penicillin G given intravenously each day (2-4 million units every 4 hours) for 10 days.

Patients who are allergic to penicillin:

(1) Tetracycline hydrochloride — 500 mg 4 times a day by mouth for 30 days. **OR**

(2) Erythromycin (stearate, ethylsuccinate or base) — 500 mg 4 times a day by mouth for 30 days.

There are NO published clinical data which adequately document the efficacy of drugs other than penicillin for syphilis of more than 1 year's duration. Cerebrospinal fluid examinations are highly recommended before therapy with these regimens.

SYPHILIS IN PREGNANCY

Evaluation of Pregnant Women

All pregnant women should have a nontreponemal serologic test for syphilis, such as the VDRL or RPR

---

* *Italics indicate commentary*

** *Food and some dairy products interfere with absorption. Oral forms of tetracycline should be given 1 hour before or 2 hours after meals.*

test, at the time of the first prenatal visit. The treponemal tests such as the FTA-ABS test should not be used for routine screening. In women suspected of being at high risk for syphilis, a second nontreponemal test should be performed during the third trimester. Seroreactive patients should be expeditiously evaluated. This evaluation should include a history and physical examination, as well as a quantitative nontreponemal test and a confirmatory treponemal test.

If the FTA-ABS test is nonreactive and there is no clinical evidence of syphilis, treatment may be withheld. Both the quantitative nontreponemal test and the confirmatory test should be repeated within four weeks. If there is clinical or serologic evidence of syphilis or if the diagnosis of syphilis cannot be excluded with reasonable certainty, the patient should be treated as outlined below.

Patients for whom there is documentation of adequate treatment for syphilis in the past need not be retreated unless there is clinical or serologic evidence of reinfection such as darkfield-positive lesions or a fourfold titer rise of a quantitative nontreponemal test.

A. For patients at all stages of pregnancy who are not allergic to penicillin: Penicillin in dosage schedules appropriate for the stage of syphilis as recommended for the treatment of nonpregnant patients.

B. For patients of all stages of pregnancy who are allergic to penicillin: Erythromycin (stearate, ethylsuccinate or base) in dosage schedules appropriate for the stage of syphilis, as recommended for the treatment of nonpregnant patients. Although these erythromycin schedules appear safe for mother and fetus, their efficacy is not well established. Therefore, the documentation of penicillin allergy is particularly important before treating a pregnant woman with erythromycin. *Erythromycin estolate and tetracycline are not recommended for syphilitic infections in pregnant women because of potential adverse effects on mother and fetus.*

Follow-up

Pregnant women who have been treated for syphilis should have monthly quantitative nontreponemal serologic tests for the remainder of the current pregnancy. Women who show a fourfold rise in titer should be retreated. After delivery, follow-up is as outlined for nonpregnant patients.

CONGENITAL SYPHILIS

Congenital syphilis may occur if the mother has syphilis during pregnancy. If the mother has received adequate penicillin treatment during pregnancy, the risk to the infant is minimal. However, all infants should be examined carefully at birth and at frequent intervals thereafter until nontreponemal serologic tests are negative.

Infected infants are frequently asymptomatic at birth and may be seronegative if the maternal infection occurred late in gestation. Infants should be treated at birth if maternal treatment was inadequate, unknown, with drugs other than penicillin, or if adequate follow-up of the infant cannot be ensured.

Infants with congenital syphilis should have a CSF examination before treatment.

Infants with abnormal CSF:

(1) Aqueous crystalline penicillin G, 50,000 units/kg intramuscularly or intravenously daily in 2 divided doses for a minimum of 10 days. **OR**

(2) Aqueous procaine penicillin G, 50,000 units/kg intramuscularly daily for a minimum of 10 days.

Infants with normal CSF:

Benzathine penicillin G, 50,000 units/kg intramuscularly in a single dose. *Although benzathine penicillin has been previously recommended and widely used, published clinical data on its efficacy in congenital neurosyphilis are lacking. If neurosyphilis cannot be excluded, the procaine or aqueous penicillin regimens are recommended. Since cerebrospinal fluid concentrations of penicillin achieved after benzathine penicillin are minimal to nonexistent, these revised recommendations seem more conservative and appropriate until clinical data on the efficacy of benzathine penicillin can be accumulated. Other antibiotics are not recommended for neonatal congenital syphilis.*

Penicillin therapy for congenital syphilis after the neonatal period should be with the same dosages used for neonatal congenital syphilis. For larger children the total dose of penicillin need not exceed the dosage used in adult syphilis of more than one year's duration. After the neonatal period, the dosage of erythromycin and tetracycline for congenital syphilitics who are allergic to penicillin should be individualized but need not exceed dosages used in adult syphilis of more than one year's duration. Tetracycline should not be given to children less than eight years of age.

FOLLOW-UP AND RETREATMENT

All patients with early syphilis and congenital syphilis should be encouraged to return for repeat quantitative nontreponemal tests 3, 6, and 12 months after treatment. Patients with syphilis of more than one year's duration should also have a repeat serologic test 24 months after treatment. Careful follow-up serologic testing is particularly important in patients treated with antibiotics other than penicillin. Examination of CSF should be planned as part of the last follow-up visit after treatment with alternative antibiotics.

All patients with neurosyphilis must be carefully followed with serologic testing for at least three years. In addition, follow-up of these patients should include clinical reevaluation at six-month intervals and repeat CSF examinations, particularly in patients treated with alternative antibiotics.

The possibility of reinfection should always be considered when retreating patients with early syphilis. A CSF examination should be performed before retreatment unless reinfection and a diagnosis of early syphilis can be established.

Retreatment should be considered when:

(1) Clinical signs or symptoms of syphilis persist or recur;

(2) There is a sustained fourfold increase in the titer of an nontreponemal test;

(3) An initially high-titer nontreponemal test fails to show a fourfold decrease within a year.

(Continued on page 316)

12-hour claims
are nothing new.

12-hour relief is.



NEW

Novafed® A Capsules

Each capsule contains pseudoephedrine hydrochloride 120 mg. and chlorpheniramine maleate 8 mg.

Controlled-Release Decongestant Plus Antihistami

It goes the distance.





Clinical studies confirm full 12-hour effectiveness.

or years, patients have heard of drugs providing long-lasting relief. But after six or eight ours, they often run out of relief. And it's too soon to take the next dose.

ow, with Novafed A, Dow introduces a prescription capsule with 12-hour effectiveness relieving allergy and hay fever symptoms. Placebo-controlled clinical studies show at the high level of decongestant in Novafed A provides relief for as long as 12 hours. the same time, its antihistamine relieves the patient's itchy eyes and runny nose *ithout* the excessive dryness of anticholinergic agents.

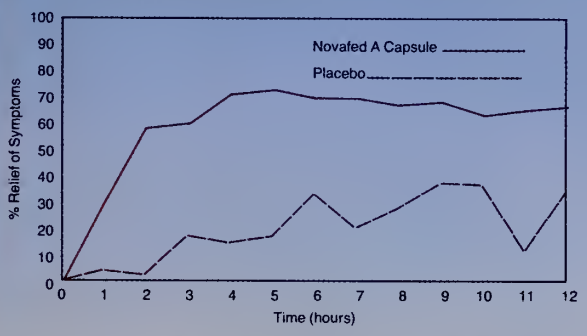
rompt onset of effect is followed by full 12-hour relief.

lease refer to the following page for bioavailability studies and prescribing information.)



atients with severe pollen allergies were sted during hay fever season in a ountryside environment and asked to te severity of five different symptoms a scale of 1 to 4.

Clinical Study: Degree of Relief from Itchy Eyes and Nose and Throat, Watery Eyes, Runny Nose*



*Unpublished data, Medical Department Files, Dow Pharmaceuticals, The Dow Chemical Company, Indianapolis, Indiana.

DOW®

Specialists in Cough and Cold Care





NEW

Novafed® A Capsules

Each capsule contains pseudoephedrine hydrochloride 120 mg. and chlorpheniramine maleate 8

Controlled-Release Decongestant Plus Antihistamine

It goes the distance.



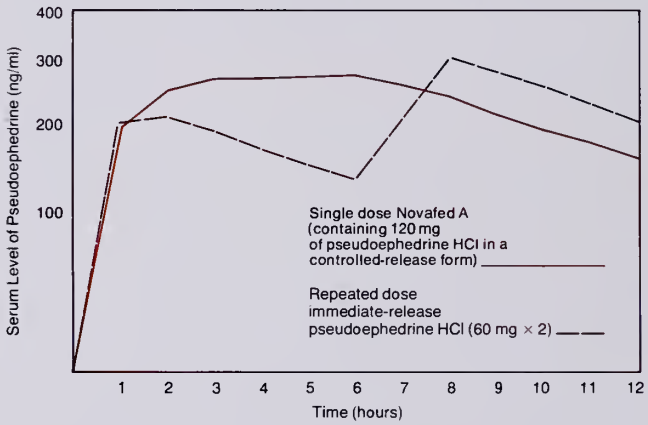
Prompt onset and sustained serum levels over 12 hour

A bioavailability study confirmed that the sustained 12-hour action of Novafed A was comparable to that of immediate-release medication taken at 6-hour intervals.

The chart at the left shows the serum levels of pseudoephedrine. Initial serum levels following one Novafed A Capsule were comparable to those following a single dose of 60 mg. pseudoephedrine hydrochloride in an immediate-release form. Serum levels of pseudoephedrine over a 12-hour period following a single dose of Novafed A were also comparable to those obtained by an immediate-release form taken every 6 hours.

The chart at the right shows the serum levels of chlorpheniramine. Initial serum levels following one Novafed A Capsule were comparable to those followi a single dose of 4 mg. chlorpheniramine maleate in an immediate-release form. Serum levels of chlorpheniramine over a 12-hour period following a single dose of Novafed A were also comparable to those obtained by an immediate-release form taken every 6 hours.

Comparison of Mean Serum Levels of Pseudoephedrine Following Novafed A and an Immediate-Release Reference Formulation*



Comparison of Mean Serum Levels of Chlorpheniramine Followir Novafed A and an Immediate-Release Reference Formulation*



*Unpublished data, Medical Department Files, Dow Pharmaceuticals, The Dow Chemical Company, Indianapolis, Indiana.

DESCRIPTION: Each NOVAFED A capsule contains 120 mg. of pseudoephedrine hydrochloride and 8 mg. of chlorpheniramine maleate. The specially formulated pellets in each capsule are designed to provide continuous therapeutic effect for about 12 hours. Nearly one-half of the active ingredients is released soon after administration and the remainder is released slowly over the remaining time period.

ACTIONS: NOVAFED A combines the action of a nasal decongestant, pseudoephedrine hydrochloride, and an antihistamine, chlorpheniramine maleate. These ingredients are combined to provide prompt and sustained nasal and upper respiratory decongestant and antihistaminic action.

INDICATIONS: NOVAFED A is indicated for the relief of nasal congestion and eustachian tube congestion associated with the common cold, sinusitis and acute upper respiratory infections. It is also indicated for perennial and seasonal allergic rhinitis, vasomotor rhinitis, allergic conjunctivitis due to inhalant allergens and foods and for mild, uncomplicated allergic skin manifestations of urticaria and angioedema. Decongestants in combination with antihistamines have been used for many years to relieve eustachian tube congestion associated with acute eustachian salpingitis, aerotitis media, acute otitis media and serous otitis media. NOVAFED A may be given concurrently, when indicated, with analgesics and antibiotics.

CONTRAINDICATIONS: Symphathomimetic amines are contraindicated in patients with severe hypertension, severe coronary artery disease, and in patients on MAO inhibitor therapy. Antihistamines are contraindicated in patients with narrow-angle glaucoma, urinary retention, peptic ulcer, during an asthmatic attack, and in patients receiving MAO inhibitors.

Children under 12: NOVAFED A controlled-release capsules should not be used in children less than 12 years of age.

Nursing Mothers: Pseudoephedrine is contraindicated in nursing mothers because of the higher than usual risk for infants from sympathomimetic amines.

Hypersensitivity: This drug is contraindicated in patients with hypersensitivity or idiosyncrasy to sympathomimetic amines or antihistamines. Patient idiosyncrasy to adrenergic agents may be manifested by insomnia, dizziness, weakness, tremor or arrhythmias.

WARNINGS: Sympathomimetic amines should be used judiciously and sparingly in patients with hypertension, diabetes mellitus, ischemic heart disease, increased intraocular pressure, hyperthyroidism, or prostatic hypertrophy. Sympathomimetics may produce central nervous system stimulation and convulsions or cardiovascular collapse with accompanying hypotension.

Antihistamines may impair mental and physical abilities required for the performance of potentially hazardous tasks, such as driving a vehicle or operating machinery, and mental alertness in children. Chlorpheniramine maleate has an atropine-like action and should be used with caution in patients with increased intraocular pressure, hyperthyroidism, cardiovascular disease, hypertension or in patients with a history of bronchial asthma.

Do not exceed recommended dosage.

Use in Pregnancy: The safety of pseudoephedrine for use during pregnancy has not been established.

Use In Elderly: The elderly (60 years and older) are more likely to have adverse reaction to sympathomimetics. Overdosage of sympathomimetics in this age group may cause hallucinations, convulsions, CNS depression, and death. Therefore, safe use of a short-acting sympathomimetic should be demonstrated in the individual elderly patient before considering the use of a sustained-action formulation.

PRECAUTIONS: This drug should be used with caution in patients with diabetes, hypertension, cardiovascular disease and hyperreactivity to ephedrine. The antihistaminic may cause drowsiness and ambulatory patients who operate machinery or motor vehicles should be cautioned accordingly.

ADVERSE REACTIONS: Hyperreactive individuals may di play ephedrine-like reactions such as tachycardia, palpi tions, headache, dizziness, or nausea. Patients sensitiv to antihistamines may experience mild sedation.

Sympathomimetic drugs have been associated with certa untoward reactions including fear, anxiety, tenseness, restlessness, tremor, weakness, pallor, respiratory diffi culty, dysuria, insomnia, hallucinations, convulsions, C depression, arrhythmias, and cardiovascular collapse wi hypotension.

Possible side effects of antihistamines are drowsiness, restlessness, dizziness, weakness, dry mouth, anorexia, nausea, headache and nervousness, blurring of vision, heartburn, dysuria and very rarely, dermatitis.

DRUG INTERACTIONS: MAO inhibitors and beta adrener blockers increase the effect of sympathomimetics. Sympathomimetics may reduce the antihypertensive effects methyldopa, mecamylamine, reserpine and veratrum alkaloids. Concomitant use of antihistamines with alcoh tricyclic antidepressants, barbiturates and other central nervous system depressants may have an additive effect

DOSAGE AND ADMINISTRATION: One capsule every 12 hours. Do not give to children under 12 years of age.

CAUTION: Federal law prohibits dispensing without prescription.

HOW SUPPLIED: NOVAFED A is supplied in red and ora colored hard gelatin capsules, monogrammed with the Dow diamond followed by the number 109, in bottles of 100.

DOW

DOW PHARMACEUTICAL
The Dow Chemical Company
Indianapolis, IN 46268

Specialists in cough and cold care



Primary Care: A Descriptive Approach

W. Grady Stumbo, M.D.*

The precise definition of primary care has not been accomplished. The term "primary care" assumes varied generic descriptions in the current literature and this results in uncertainty in the evaluation of the technical skills and knowledge primary care providers should have.

At times, primary care may be described as being synonymous with Family Practice; yet it also has been used to include the practices of the general internist, pediatrician, and obstetrician-gynecologist. Physicians may disagree on the definition of primary care, but they seem to be in agreement with the concept that primary care is their responsibility. Further, it is viewed by physicians as being focused on the needs of individuals and families and not communities.

The professionals who provide basic support services to the health care system—nurses, dentists, pharmacists, social workers, dietitians, physician extenders, and others —do not view primary care solely as a physician responsibility. These professionals describe health care needs that cannot be met by physicians and identify individuals who cannot be adequately served by physicians. Thus, based on their individual skills, they view themselves as having responsibilitv in primary care and view their profession as having services that will meet unmet needs with or without the direction of a physician. Objectively, these professionals are correct and must be ascribed a role in primary care. However, it is incorrect, on their part, to equate individual skills and knowledge as being equal to the assemblage of these units into a whole for the delivery of health services under the direction of physicians. The fact is that there are functions non-phvsicians provide in greater depth and to a more complete degree than physicians. However, the best results are obtained when these functions are provided to the patient in a system that has overall direction and supervision.

To the public, primary care means a right to health care and health care information with minimal effort on their part. The consumer then views accessability, availability, expense, confidence in, and responsiveness of primary care as important as patient care itself.

To insure an acceptable pattern of primary care, basic principles must be present before a definition is evolved. The following four principles define the parameters of primary care:

1. The patient should have health care providers who are competent and capable of caring for the greater majority of their medical ills, and who are comfortable in seeking consultation in those areas where they are unfamiliar.
2. The center for health care where the patient seeks services should be adequately structured so as to provide the most common types of services without undue time loss to the patient.
3. The staff should be made up of individuals whose presence contributes to the comprehensive, expeditious and cost effectiveness of services delivered to the patient. There should be an emphasis on a health care team, with task delegation to individuals possessing appropriate requisite training.
4. In addition to delivering quality medical care, there should exist a heavy emphasis on health care . . . with a structured approach to health appraisal, prospective medicine, health education, etc.[1]

In addition to the basic principles, a differentiation between ambulatory care and primary care must be developed.

Primary care is best thought of in terms of medical care functions rather than as a medical discipline. Thus, a health provider may function in primary, secondary, or tertiary care; or he may function in only one or two areas. The terms "primary", "secondary", and "tertiary", represent portions of the continuum from the most straightforward care to the most complex care. The demarcation between the levels of care is a matter of judgement and these decisions do and will change with time.

Ambulatory care is simply defined as the delivery of health care services to the sick or well who are not confined to a bed or institution. It does not carry with it an inherent designation of:

a. What type of health provider is providing the care—family physician, surgeon, hematologist, nurse, physician assistant, etc.;
b. What kind of setting the care is provided in—office, primary care center, emergency room, public health department, etc.;
c. Whether it is episodic or chronic, or whether it is a visit requiring primary, secondary, or tertiary services.

From this base, one can attempt to define primary care. The following is offered as a generic description:[2]

1. Primary health care is best described as care which may be initiated by the patient and/or provider in a variety of settings and consists of a broad range of basic personal health services, including:
   —promotion and maintenance of health,

*President, East Kentucky Health Services Center, Inc. and Primary care physician in Hindman

—prevention of illness and disability,
—basic care during acute and chronic phases of illness,
—guidance and counseling of individuals and families,
—referral to other health care providers and community resources when appropriate.

2. In providing such services:
—the physical, emotional, social and economic status, as well as the cultural and environmental backgrounds of patients and families are considered;
—the individual is provided with entry into the health care system;
—a single provider or team of providers, along with the patient, is responsible for the continuing coordination and management of all aspects of basic health services needed for individual and/or family care.

In attempting to define services offered in primary care, one can begin by defining the health or non-health patterns of the public and relating to those patterns, the procedures, or drugs necessary for a satisfactory solution. (Table 1).

This approach in defining primary care services is valid because the inputs to primary care are symptoms and complaints. The above examples relating either category or problem to the procedure or drug can be expanded in great detail, as has been done at East Kentucky Health Services Center, Inc. EKHSC staff believes primary care requires special training. With this training comes a need to develop audit techniques to differentiate degrees of quality in primary care. When viewing primary care in this fashion, it becomes possible to evaluate the breadth of training and skills necessary for primary care and to incorporate all health professionals in delivering medical services in a stratified manner.

Exactly how a primary health care team will fit into a physician's office, clinic, or primary care center depends on the needs of that facility and on the attitude of the community. However, basic functions will remain the same regardless of the setting. Primary care health teams should be able to screen patients for preventative care, separate the ill from the non-ill, recognize certain common illnesses, recommend basic therapy, provide patient education and be able to arrange appropriate referral for higher levels of care.

From this, it can be concluded that strictly from a physician's point of view, all physicians may, at times, provide a service that is defined as primary care, but other physicians may function solely or primarily in the role of primary care. (Fig. 1).

It is acknowledged that primary care services can be provided in varied physical plants by different individuals and organizations to different degrees. The most effective primary care health patterns would be seen in a system that provides:[3]

—Majority Care
—Ambulatory Care
—Continuity of Care
—Entry Point Care
—Comprehensive Care
—Unselected Problem Care
—Preventative Care

Health care teams should operate as much as possible as identifiable small practices under a common roof with shared support services. In addition, they should be linked to other providers and organizations through appropriate mechanisms.

Table 1

CATEGORY	PROBLEM	RELATED DRUGS/PROCEDURES
1. Infectious Disease	Otitis Media	Antibiotics Decongestants Myringotomy
	Pharyngitis	Bacterial Cultures Gram Stain Mono Spot Test Antibiotics
2. Pulmonary	Emphysema Coal Worker's Pneumoconiosis Bronchitis	Ability to interpret x-rays Pulmonary Function Tests Spirometry Blood Gas Analysis IPPB Gram Stain of Sputum Bronchodilators/Expectorants Instruction in Percussion and Postural Drainage Antibiotics and Cultures
3. Gynecology	Vaginitis	Pap Smear Microscope KOH and Saline Smears Cultures
4. General Office	Procedures Community	Training of Staff Patient Education Disability Education Work Fitness Education Preventative Medicine
	Health Care System	Referral Mechanism Consultation Mechanism
	Records	Problem Type Accounting Procedures

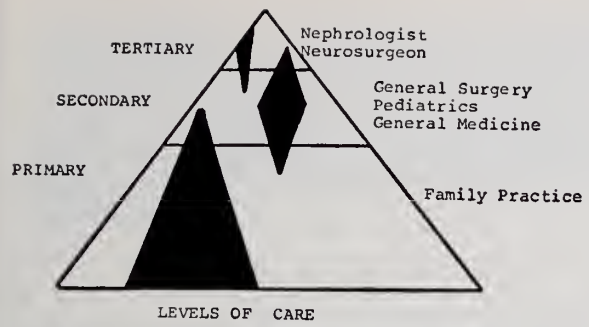


FIG. 1

Statistics show that during 1973, the estimated number of physician visits was over one billion, an average of five visits per person per year.[4] This indicated that aspects of primary care are the largest single component of the nation's health care delivery system. Thus, the issue of primary care is now beyond the point of merely debating the issue of whether family physicians, internists, or pediatricians deliver primary care. The critical need in primary care is to have a model that is viable and that can demonstrate that primary care is effective and satisfying.

The problem in primary care is one of quantity—too few providers for too many demands. According to the Bureau for Health Manpower of the Department for Health, Education and Welfare, the percentage of office-based physicians in the primary care specialties dropped from 31.5% to 28.4% between 1968 and 1972.[5] Furthermore, it is reported that there is an 18-fold difference in the increase of hospital-based or referral-consultant practitioners as compared to the office based primary care groups. In 1972, 75% of the population consulted a physician at least once during the year, while in the same year, only 10.6% of the population was hospitalized in short-stay hospitals.[5] Despite the fact that the hospitalized patient may have more acute medical problems, ambulatory care represents the majority of the population's contacts with the health care system. In the future, it does seem there will be an increased demand for primary care.

Despite the importance of this type of care, its essential characteristics have not been clarified. There are many basic questions yet to be answered, some of which are:

1. *What professionals are to provide primary care?*
2. *What training should these professionals have?*
3. *What type of practice setting should primary care be provided in?*
4. *What type of organizational structure should oversee the providing of primary care?*
5. *What should be the financial support of primary care?*

From answers to these basic questions and from the general guidelines presented in this paper, the training and evaluation of primary care providers and services can be placed in a realistic framework. There is not now, nor should there be, a single blueprint for primary care. It is important that we maintain flexibility in terms of development, thus allowing primary care to have varied goals in response to community needs.

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MARK YOUR CALENDAR

KMA ANNUAL MEETING

SEPTEMBER 28-30, 1976

Ramada Inn/Bluegrass Convention Center

Louisville

ORGANIZATION SECTION

Emergency Care Will Be Topic at Opening Session Of 1976 KMA Annual Meeting, September 28-30

The 1976 KMA Annual Meeting, in its opening scientific session on Tuesday morning, September 28, will spotlight emergency medical care. A number of well known physicians will be on hand to present this timely topic during the 126th Annual Meeting of the Association, to be held September 28-30 at the Ramada Inn/Bluegrass Convention Center in Louisville.

Plans are nearly finalized for the week's activities, to include four general scientific sessions, 17 specialty group meetings, two House of Delegates meetings, the President's Luncheon, the KEMPAC Seminar, and the Annual Convention of the Auxiliary to KMA. University of Louisville School of Medicine alumni reunions will be held and an array of scientific and technical exhibits will be displayed for educational purposes.

The House of Delegates will hold business sessions on Monday, September 27 at 9 a.m., and again on Wednesday, September 29 at 7 p.m. This year's President's Luncheon, set for Wednesday, September 29 at 11:50 a.m., will feature J. Ed McConnell, President of Kentucky Blue Cross, Blue Shield, and Delta Dental Plan as the guest speaker.

Other themes for the 1976 scientific sessions include breast problems and antibiotics. Among the speakers to discuss emergency medical care are Thomas S. Morse, M.D., Columbus, Ohio, and Ronald L. Krome, M.D., Detroit, Michigan.

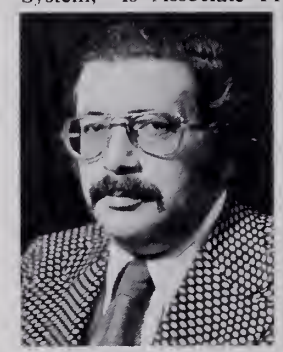
Speaking on "American Trauma Society—Lessons Learned From Cancer and Coronaries," Doctor Morse



Doctor Morse

serves as the current President of the American Trauma Society. He is Associate Professor of Surgery (Pediatrics) at Ohio State University College of Medicine and serves on the Columbus Emergency Medical Services Advisory Council. He is a contributing editor of *Emergency Review*, and belongs to numerous organizations, to include the American Association for the Surgery of Trauma, American Association of Automotive Medicine, International Society for Burn Injuries and University Association for Emergency Medical Services (UA/EMS).

Doctor Krome, who will speak on "Emergency System," is Associate Professor of Surgery at Wayne



Doctor Krome

State University School of Medicine and is Director of the Emergency Department at Detroit General Hospital. He is currently President-Elect of the American College of Emergency Physicians and formerly served as ACEP Vice-President. He is the current Treasurer of the UA/EMS and serves on the Detroit Committee on Trauma. A Fellow of the American College of Surgeons, Doctor Krome is Editor of *The Journal of the American College of Emergency Physicians*.

More information on the program and activities of the 1976 KMA Annual Meeting will appear in the July and August issues of *The Journal of KMA* and the "Communicator."

R. Glenn Greene, M.D., Owensboro, was elected as a Fellow of the American College of Physicians at a recent meeting of the College's Board of Regents in Philadelphia. Doctor Greene is Chairman of the KMA Continuing Medical Education Committee.



Ellis A. Fuller, M.D., (right) accepts a certificate of accreditation for the Louisville Area CME Consortium from KMA President, David A. Hull, M.D. The presentation, the first awarded by KMA, was made at the April 8 meeting of the Board of Trustees.

Watch August Journal for ANNUAL MEETING Details

Digest of Proceedings, Board of Trustees
April 8, 1976

The KMA Board of Trustees met on April 8 at the Headquarters Office in Louisville. The President's Report and Headquarters Office Report were reviewed, noting that an extensive effort had been made by the officers and staff in regard to the recent professional liability insurance campaign in the Kentucky General Assembly.



Arthur H. Keeney, M.D., (right) Dean of the University of Louisville School of Medicine, accepts a check in the amount of $10,895.62 from the American Medical Association Education and Research Foundation from David A. Hull, M.D., KMA President.

The budget for fiscal year 1976-77 was approved by the Board and it was noted that 227 regular, active members have not paid the 1975 special dues assessment which was passed by the House of Delegates.

The Board of Medical Licensure reported that plans for the implementation of the CME Program are now being finalized. W. Neville Caudill, M.D., Louisville, reported on the activities of the Kentucky Peer Review Organization in regard to application for a conditional grant as the PSRO in Kentucky.

The Board made nominations to forward to the Governor for physicians to serve on the Board of Medical Licensure and an Advisory Committee on Implementing Liability Insurance Legislation.

The Committee on State Legislative Activities reported an 89.8% success rate on all bills pertaining to health in the 1976 Kentucky General Assembly. The Public Relations Committee campaign on liability insurance was ruled a success and legal counsel pointed out a possible test suit on SB 248 may be filed in the near future. Funds were authorized to conduct a feasibility study to determine the advisability of setting up a KMA-controlled insurance company.

The Board appointed an Ad Hoc Committee to Overview KMA Peer Review Activities which will study KMA's current activities in monitoring quality of care.

The Hospital Committee was instructed by the Board to develop an appeals mechanism for those physicians who feel they have been unduly denied hospital privileges. Other reports reviewed were those of the Ad Hoc Committee on Mental Health-Mental Retardation and the Ad Hoc Committee to Study the Report of the Council on Public Higher Education.



Doctor Hull presents the AMA-ERF check in the amount of $6,698.62 to D. Kay Clawson, M.D., (left) Dean of the University of Kentucky College of Medicine. Funds were made available to the medical schools through the efforts of the Auxiliary to KMA.

It was announced that tours of the new Blue Cross-Blue Shield Service Center would be arranged during the KMA Annual Meeting. Recognition as a specialty group was given to the Kentucky Society of Allergy and Clinical Immunology.

In other action the Board recognized the efforts of the Louisville Area CME Consortium by presenting Ellis Fuller, M.D., Louisville, a certificate of accreditation for the Consortium. This represented the first KMA accreditation survey.

Checks totaling over $17,000 were presented to the deans of the two medical schools in Kentucky from the AMA-ERF fund. The funds came about as a result of efforts of the Auxiliary members across the state. Doctor Hull expressed his appreciation to the Auxiliary for its year-long efforts in helping make these funds available to the medical schools.

AMA Annual Convention Offers Numerous CME Opportunities

The 125th Annual Convention of the American Medical Association will take place June 26-July 1 in Dallas. Business sessions will be held at the Fairmont Hotel.

Fifty-seven postgraduate courses and 47 scientific sessions, all accredited by Category I toward the AMA Physicians Recognition Award, will be featured. Directed toward the needs of the practicing physician, the assembly will also include eight telecourses at the Dallas hotels and Convention Center, a lecture in real estate investment, and 30 medical motion pictures.

The Auxiliary to AMA will hold its annual session on June 27-30 at the Statler-Hilton Hotel and will feature Michael DeBakey, M.D., and Bess Myerson as luncheon speakers.

POSTGRADUATE OPPORTUNITIES

IN KENTUCKY

JULY

14-15 Summer Seminar, Kentucky Academy of Family Physicians, Holiday Inn, Bardstown

27 Postgraduate course, "Trauma and Its Management in Kentucky," (Speaker: Kimball I. Maull, M.D., Assistant Professor of Surgery, University of Kentucky Medical Center), Whitesburg Appalachian Regional Hospital, Whitesburg

IN SURROUNDING STATES

JUNE

7-11 18th Annual Benjamin Felson lectures in Diagnostic Radiology, University of Cincinnati College of Medicine, Cincinnati

26—July 1 Annual Convention, American Medical Association, Dallas

SEPTEMBER

20-23 Annual Meeting, American Academy of Family Physicians, Sheraton-Boston, Boston

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CORRECTION

In the May, 1976, issue of *The Journal* on this page, the postgraduate course on "Trauma and Its Management in Kentucky," to be held at the Whitesburg Appalachian Regional Hospital was listed for July 25. This date should be **July 27.**

Just a Reminder—

125th AMA ANNUAL CONVENTION

JUNE 26-JULY 1

FAIRMONT HOTEL, DALLAS

- **47 Scientific Sessions**
- **57 Postgraduate Courses**
- **8 Telecourses**
- **30 Medical Motion Pictures**

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Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13μg/ml) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with preexisting liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg of pyrantel base/ml) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg/lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 ml of Antiminth per 10 lb. of body weight. (One teaspoonful=5 ml.)

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WSYL Offers Foreign Residents Help in Medical Emergencies

We Speak Your Language (WSYL), a program initiated through the efforts of the Louisville Chapter of the American Red Cross, Norton-Children's Hospital, the University of Louisville Department of Modern Languages, and the Altrusa Club, is available in the Louisville area to persons who speak little or no English.

Providing service in handling medical emergencies to people who speak French, German, Spanish, and Vietnamese, the program hopes to expand its service to other languages. Operating on a volunteer basis, the WSYL telephone number, manned by the Red Cross on a 24-hour basis, is (502) 589-4450.

Roundworm Infections of GI Tract

(Continued from page 285)

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Syphilis—CDC Treatment Schedules

(Continued from page 304)

Patients should be retreated with the schedules recommended for syphilis of more than one year's duration. In general, only one retreatment course is indicated because patients may maintain stable, low titers of nontreponemal tests or have irreversible anatomical damage.

EPIDEMIOLOGIC TREATMENT

Patients who have been exposed to infectious syphilis within the preceding three months and other patients who on epidemiologic grounds are at high risk for syphilis should be treated as for early syphilis. Every effort should be made to establish a diagnosis in these cases.

FROM THE EDITOR'S NOTEBOOK

Cost-consciousness in the area of health care has led one physician to raise a question to which all of us might give serious thought.

"The massive proliferation of electronic, computerized, automated, and nuclear devices and procedures in medical practice fills me with increasing doubts. In our love affair with the new technology, are we losing sight of the patient? Let's ask ourselves a few blunt questions.

"Do all these new devices and techniques help the patient, or do they only make us feel more secure in what we're doing? Are they often used as shortcuts to diagnoses that we could have arrived at by careful history and physical examination? Can their huge cost be justified in terms of the patient benefit? Or are they sometimes just sophisticated toys we like to play with?"

". . . . It spooks me that all these elegant new technological aids may get incorporated in the criteria-of-care manuals being devised for use in PSRO and other so-called quality assurance programs. If they do, doctors are apt to feel that they must use them in every case, whether their clinical judgment says they're indicated or not. Result? Skyrocketing medical costs."

". . . . Before we order a procedure, we need to ask ourselves what chance it has of benefiting the patient. If we can answer that question honestly, perhaps we'll use these new aids to practice in a more critical and economical manner. And perhaps we'll keep our clinical skills from atrophying in slothful dependence on technology."

Robert Ray McGee, M.D.
Clarksdale, Miss.
Medical Economics, February 9, 1976

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BUD ERNST **RAY JONES**



MATERNAL MORTALITY



From the Files of the KMA Maternal Mortality Study Committee

—Edited by John W. Greene, Jr., M.D.

12-73. This 29-year-old married, white, Gravida 3, Para 1, Ab.1 had a previous Cesarean section.

She came to the hospital at 5 a.m. on August 27, 1973 at 7-1/2 months gestation with a history that she had complained of gas at 8:30 p.m. the night before. She took Alka Seltzer, which relieved the pain. She was awakened at 1:00 a.m. with lower abdominal pain. Her physician instructed her to take an enema. In spite of this, the pain steadily worsened.

She was admitted in shock with rapid, shallow respirations. Her pupils were dilated, the apical pulse was faint, no blood pressure or pulse was obtainable, although she was responsive to questions. No fetal heart tones could be heard. Admission hemoglobin was 7.6, hematocrit 20.5%, WBC 18,000, and no urine was obtained on catheterization. A cut down was done on the right ankle and plasma and intravenous fluids administered until blood was available.

She was taken directly to the operating room, receiving only oxygen. A low, mid-line incision was made. Approximately 3,000 cc of bloody fluid was removed from the abdominal cavity. The uterus had ruptured on the anterior wall, apparently from the old Cesarean scar. A dead female infant and membranes were free in the abdominal cavity. The placenta was then delivered and a three-layer closure of the uterus was performed. Approximately 1500 cc of blood was removed from the abdominal cavity. At the completion of the procedure her blood pressure was recorded at 110 systolic. She received fluids during surgery and 2,500 cc blood.

Medical consultation was obtained. At 10:00 a.m. her blood pressure was unobtainable, her pulse was 60 and weak. She appeared pale. She had moist inspiratory breath sounds bilaterally and her pupils were dilated. She was receiving the 6th unit of blood and had only bloody urine from the catheter. She had bloody froth from her mouth around the endotracheal tube. She was also bleeding from the multiple venapuncture sites. One hundred mg Solu-Cortef, intravenously, plus 5 mg Aquamephytan was given. One hundred mg Edecrin, intravenously, was administered for the apparent pulmonary edema. In spite of these measures, she expired at 11:12 a.m.

An autopsy was refused. The cause of death was listed as:

1. Ruptured pregnant uterus
2. Hypofibrinogenemia

Comment

The Committee classified this as a direct obstetrical death with preventable factors. It was first noted that she did not receive adequate prenatal care and that she evidently did not present herself until she was 7 plus months gestation. At the time of operation, it would seem from what is presented in the protocol, that adequate blood replacement was given. Perhaps she was overtransfused. Studies of coagulation factors, namely, platelets, prothrombin time, etc. were not carried out or available. Perhaps fresh frozen plasma would have corrected what seemed to be a coagulation defect. One member of the Committee noted that the central venous pressure line might have prevented what appeared to be her demise, which seemed to be caused by pulmonary edema second to overloaded circulation and congestive heart failure. Again, as so often the situation, an autopsy was not obtained. However, from the clinical information presented, it would appear that this woman died in pulmonary edema with concommitant congestive heart failure.

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ANUSOL-HC® SUPPOSITORIES
Rectal Suppositories with Hydrocortisone Acetate

ANUSOL-HC® CREAM
Rectal Cream with Hydrocortisone Acetate

CAUTION: Federal law prohibits dispensing Anusol-HC Suppositories and Anusol-HC Cream without prescription.

Description: Each Anusol-HC Suppository contains hydrocortisone acetate, 10.0 mg; bismuth subgallate, 2.25%; bismuth resorcin compound, 1.75%; benzyl benzoate, 1.2%; Peruvian Balsam, 1.8%; zinc oxide, 11.0%; also contains the following inactive ingredients: bismuth subiodide, calcium phosphate, and coloring in a bland hydrogenated oil-cocoa butter base.

Each gram of Anusol-HC Cream contains hydrocortisone acetate, 5.0 mg; bismuth subgallate, 22.5 mg; bismuth resorcin compound, 17.5 mg; benzyl benzoate, 12.0 mg; Peruvian Balsam, 18.0 mg; zinc oxide, 110.0 mg; also contains the following inactive ingredients: propylene glycol, bismuth subiodide, propylparaben, methylparaben, polysorbate 60, sorbitan monostearate in a water-miscible base of mineral oil and glyceryl monostearate. Non-staining.

Indications: Anusol-HC is adjunctive therapy for the symptomatic relief of pain and discomfort in: external and internal hemorrhoids, proctitis, papillitis, cryptitis and fissures, incomplete fistulas, and relief of local pain following anorectal surgery.

Anusol-HC is especially indicated when inflammation is present. When acute symptoms subside, most patients can be maintained on regular Anusol® Suppositories or Ointment.

Contraindications: History of sensitivity to any component. Topical corticosteroids should not be employed in tuberculous, fungal and most viral lesions of the skin (including herpes, vaccinia and varicella).

Warnings: The safe use of topical steroids during pregnancy has not been fully established. Therefore, during pregnancy they should not be used unnecessarily on extended areas, in large amounts or for prolonged periods of time.

Precautions: Symptomatic relief should not delay definitive diagnoses or treatment. When there is bacterial skin infection, topical corticosteroids should be used only with appropriate concomitant antimicrobial therapy. Prolonged or excessive use of corticosteroids might produce systemic effects.

Dosage and Administration: Anusol-HC Suppositories: Remove foil wrapper and insert into the anus. One suppository in the morning and one at bedtime, for 3 to 6 days or until inflammation subsides. Then maintain patient comfort with regular Anusol.

Anusol-HC Cream: Adults—Remove tube cap and attach the plastic applicator. After gentle bathing and drying of the area, apply to the exterior surface and gently rub in. For internal use, insert the applicator by applying gentle, continuous pressure. Then squeeze tube to deliver medication. Cream should be applied 3 or 4 times a day for 3 to 6 days or until inflammation subsides. Then maintain patient comfort with regular Anusol.

Supplied: Anusol-HC Suppositories—boxes of 12 (N 0047-0089-12) suppositories in silver foil strips with (WC) printed in black.

Anusol-HC Cream—one-ounce tube (N 0047-0090-01) with plastic applicator; detachable label.

Full information is available on request.

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suppositories and cream
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pain and burning respond in minutes

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Artist's interpretation in bas-relief of external hemorrhoids, postoperative anorectal wounds and anal dermatitis.

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NEOSPORIN® Ointment
(polymyxin B-bacitracin-neomycin)
is a famous fighter, too.

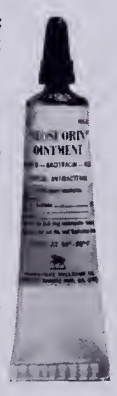
Provides overlapping, broad-spectrum antibacterial action to help combat infection caused by common susceptible pathogens (including staph and strep).

Each gram contains: Aerosporin® brand Polymyxin B Sulfate 5,000 units; zinc bacitracin 400 units; neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin base); special white petrolatum qs in tubes of 1 oz and 1/2 oz and 1/32 oz (approx.) foil packets.

INDICATIONS: Therapeutically (as an adjunct to systemic therapy when indicated) for topical infections, primary or secondary, due to susceptible organisms, as in: • infected burns, skin grafts, surgical incisions, otitis externa • primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia) • secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis) • traumatic lesions, inflamed or suppurating as a result of bacterial infection.

Prophylactically, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing. **CONTRAINDICATIONS:** Not for use in the eyes or external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of the components. **WARNING:** Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended. **PRECAUTIONS:** As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs. **ADVERSE REACTIONS:** Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

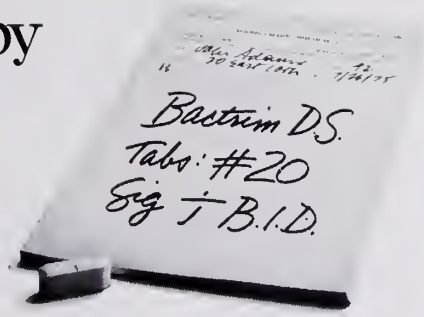
Complete literature available on request from Professional Services Dept. PML.



Wellcome

Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

10-day Bactrim therapy outperforms 10-day ampicillin therapy.



In a multicenter, double-blind study of patients with chronic or frequently recurrent urinary tract infection, Bactrim 10-day therapy outperformed ampicillin 10-day therapy by 27.2%, when comparing patients who maintained clear cultures for eight weeks. Criterion for "clear culture" was 1000 or fewer organisms/ml of urine.

While adverse reactions noted in this study were mild (*e.g.*, vomiting, nausea, rash), more serious reactions can occur with these drugs. See manufacturer's product information for complete listing. Maintain adequate fluid intake; perform frequent CBC's and urinalyses with microscopic examination.

Note: Bactrim tablets were used in these clinical trials. Bioequivalency studies show one Bactrim DS double strength tablet is equivalent to two Bactrim tablets.

Bactrim™ DS
(160 mg trimethoprim and 800 mg sulfamethoxazole)
Double Strength tablets
Just 1 tablet B.I.D.

Bactrim™


(80 mg trimethoprim and 400 mg sulfamethoxazole)
2 tablets B.I.D.

For chronic or frequently recurrent cystitis and pyelonephritis due to susceptible organisms.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Chronic urinary tract infections evidenced by persistent bacteriuria (symptomatic or asymptomatic), frequently recurrent infections (relapse or reinfection), or infections associated with urinary tract complications, such as obstruction. Primarily for cystitis, pyelonephritis or pyelitis due to susceptible strains of *E. coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris* and *Proteus morganii.*

NOTE: The increasing frequency of resistant organisms limits the usefulness of antibacterials, especially in these urinary tract infections. The recommended quantitative disc susceptibility method (*Federal Register, 37*:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers.

Warnings: Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted. **Data are insufficient to recommend use in infants and children under 12.**

Precautions: Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for children under 12. Usual adult dosage: 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

For patients with renal impairment:

Creatinine Clearance (ml/min)	Recommended Dosage Regimen
Above 30	Usual standard regimen
15-30	1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) every 24 hours
Below 15	Use not recommended

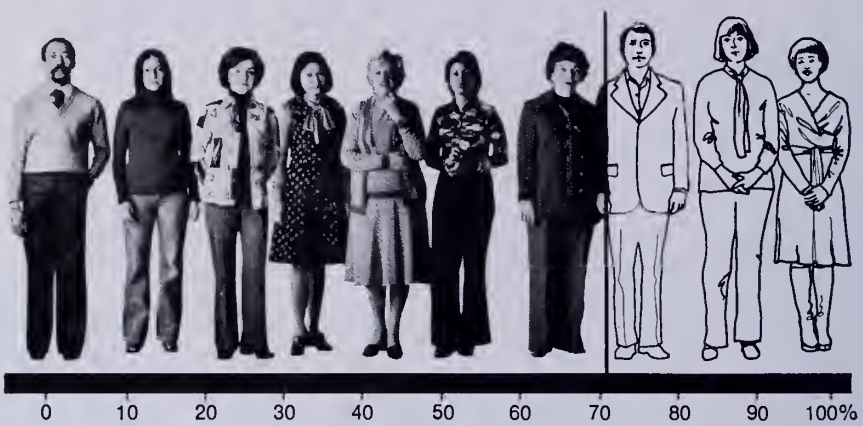
Supplied: Double Strength (DS) tablets, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100. Tablets, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole — bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40, available singly and in trays of 10.

Oral suspension, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole; fruit-licorice flavored — bottles of 16 oz (1 pint).

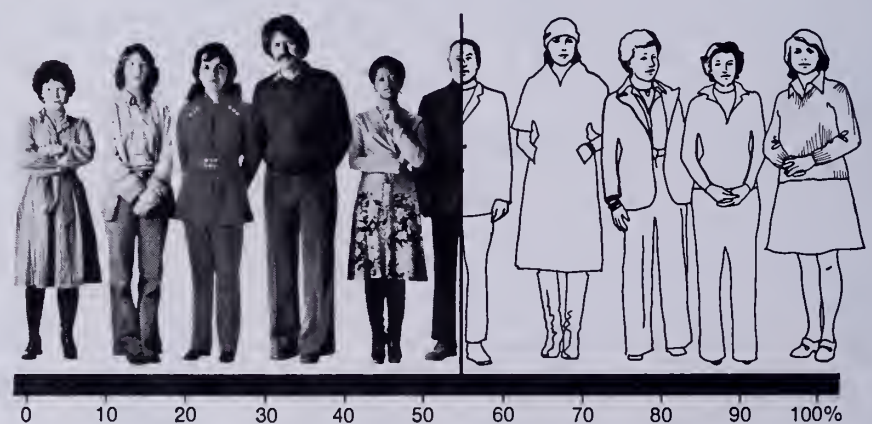
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In a multicenter study of patients with chronic or frequently recurrent urinary tract infections

Bactrim was 27.2%* more effective than ampicillin in keeping patients infection-free for 8 weeks.†



Bactrim–70.5% of 78 patients infection-free at 8 weeks.



ampicillin–55.4% of 74 patients infection-free at 8 weeks.

*This percentage is arrived at by the statistical method of dividing the difference between Bactrim and ampicillin results (15.1%) by the percent of ampicillin results (55.4%).

†Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey 07110

Bactrim™ DS

(160 mg trimethoprim and 800 mg sulfamethoxazole)

Double Strength tablets Just 1 tablet B.I.D.

Note: Bactrim tablets were used in these clinical trials. Bioequivalency studies show one Bactrim DS double strength tablet is equivalent to two Bactrim tablets.

Please see summary of product information on preceding page.

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The Journal of The KENTUCKY Medical Association

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Both often



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequenc and/or severity of grand mal seizures ma require increased dosage of standard anti convulsant medication; abrupt withdrawa may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.



Valium®
(diazepam) IV

2-mg, 5-mg, 10-mg scored tablets

in psychoneurotic
anxiety states
with associated
depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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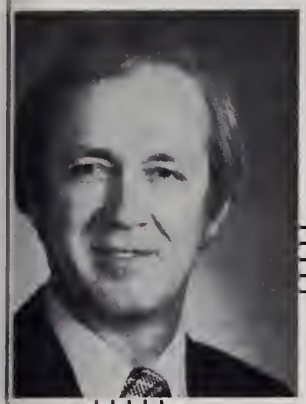
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MESSAGE FROM THE PRESIDENT



Recently, your Quick Action Committee made a trip to Washington to confer with the Kentucky Congressional delegation on an individual basis. This was done to replace the annual Washington Dinner which was deleted this year because of the many pressing matters of the recently past Kentucky General Assembly and the diminished staff which we have available now. Conferring with the Senators and Congressmen is an enlightening experience which I would encourage each of you to have as frequently as possible. There are several points made at these meetings which I would like to pass on to you.

The first is that National Health Insurance is, in their minds, an eventual certainty. At the present time, however, Congressional feeling is that it is too costly to become a reality but that some way will be made for it to become law. The best estimates are that this would not occur before 1980. We were urged to take the message back to Kentucky physicians that the physicians in the entire country should come up with a workable National Health Insurance Plan or Congress would come up with one for us.

Fiscal matters seem to occupy the minds of the Kentucky delegation. Some of the figures used and facts given by Congressman Natcher serve to illustrate their concern. In 1962, the Federal budget was less than $100 billion. This rose to $200 billion in 1971, $300 billion in 1975 and projected budget for 1977-78 is that of $394 billion. An additional fact of illustration is that the interest on the National Debt presently is $42.1 billion per year and that this is costing the American taxpayer $110 million each day for interest alone. The concern of the Legislature seems genuine and they point to the Budget Reform Act as a method of trying to keep a balanced budget in the future.

Lastly, an additional observation brought home by your Quick Action Committee was that physician involvement is an absolute necessity in spite of the many, many frustrations that accompany such involvement. Representation on governmental program boards should be sought, the private sector banner should be carried and involvement by physicians, no matter how distasteful, should not be abandoned. At the time of this writing HEW will be polling individual physicians regarding the PSRO outcome in the State of Kentucky and we were assured in Washington that if the physician organization of KPRO does not perform PSRO that a delegated organization will do so.

Finally, in accordance with your wishes, representatives of the Board of Trustees will soon be meeting with Medicare representatives on your behalf. You will find a piece of correspondence from the Medicare agency enclosed with this *Journal* and you are urged to read it and become familiar with their desires regarding the proper submission of Medicare claims.

David A. Shaw

POSTGRADUATE OPPORTUNITIES

IN KENTUCKY

JULY

14-15 Summer Seminar, Kentucky Academy of Family Physicians, Holiday Inn, Bardstown

27 Postgraduate course, "Trauma and Its Management in Kentucky," (Speaker: Kimball I. Maull, M.D., Assistant Professor of Surgery, University of Kentucky Medical Center), Whitesburg Appalachian Regional Hospital, Whitesburg

SEPTEMBER

26-30 KMA Annual Meeting, Ramada Inn/Bluegrass Convention Center, Louisville

26-Oct. 2 Seventh Family Medicine Review*, University of Kentucky Medical Center. **(Identical session repeated October 17-23).** Fee: $295.

OCTOBER

7-8 "New Methods in Tumor Localization,"* University of Kentucky Medical Center, Lexington

30 Kentucky Regional Meeting, American College of Physicians, Stouffer's Louisville Inn, Louisville. Contact: Franklin B. Moosnick, M.D., 184 N. Mill Street, Lexington, Ky. 40507

NOVEMBER

3 Twelfth Annual Louisville Pediatric Society Lecture, Health Sciences Center, Louisville

4-5 Tenth Annual Newborn Symposium, University of Louisville School of Medicine, Health Sciences Center, Louisville

IN SURROUNDING STATES

SEPTEMBER

20-23 Annual Meeting, American Academy of Family Physicians, Sheraton-Boston, Boston

OCTOBER

4-5 24th Annual Assembly, Tennessee Valley Medical Assembly, Read House Chattanooga . . . Contact: Charles Portera, M.D., 960 E. 3rd St., Suite 313, Chattanooga, Tenn. 37403.

26-27 Symposium on Urgent and Controversial Pediatric Conditions, Indiana University School of Medicine, Stouffer's Indianapolis Inn, Indianapolis. Contact: Jay Grosfeld, M.D., James Whitcomb Riley Hospital for Children, 1100 W. Michigan St., Indianapolis, Ind. 46202.

* * * * * *

Send meeting information to:

The Journal

Kentucky Medical Association

3532 Ephraim McDowell Drive

Louisville, Ky. 40205

**For further information, contact: Frank R. Lemon, M.D., Associate Dean for Continuing Education, University of Kentucky College of Medicine, Lexington 40506*

***For further information contact: Gerald D. Swim, Executive Director, Office of Continuing Education, University of Louisville School of Medicine, Louisville 40202*

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Report From KMA Cancer Committee--

Cancer Education Program at The University of Kentucky College of Medicine*

The University of Kentucky College of Medicine has undertaken to establish a comprehensive Cancer Education Program. The general objectives of the program are 1) to develop a revised Core Cancer Curriculum for medical students, and 2) to develop innovative methods for dissemination of new information about cancer management.

Specific activities related to the attainment of the first objective are as follows:

1. Determine what is being currently taught about cancer in the diverse courses of the basic sciences and clinical curriculum.
2. Make necessary revisions in the curriculum as indicated by the review of the cancer content of the medical school curriculum to insure that thorough coverage of the entire field of cancer is presented.
3. Develop a comprehensive cancer examination to be administered to medical students at the end of the second year as a pre-test and again at the end of the third year curriculum on cognitive cancer learning. An additional benefit will be to identify outstanding students who may wish to pursue special cancer-related projects and to take special fourth year elective courses in cancer.

Those performing poorly on the examination will be encouraged to improve their knowledge through use of self-instructional materials such as slide tapes, video-tapes, programmed tests, and journal articles and textbooks. Another modality which is being developed is the computer-assisted self evaluation (CASE) program which originated at the University of Louisville and has proved very successful at the University of Kentucky College of Medicine as utilized by the Physiology and Biophysics Department.

Ultimately, it is hoped that each student graduating from the University of Kentucky College of Medicine will have achieved a certain level of cancer knowledge considered essential for the diagnosis, staging, and treatment of the cancers he or she will encounter in their clinical practice. Although the program is not designed to develop cancer specialists, it is hoped that some students will be stimulated to seek further training at a postgraduate level to prepare them for careers in either cancer research or clinical oncology.

*This article was prepared by William R. Meeker, Jr., M.D., Associate Professor of Surgery, University of Kentucky College of Medicine, Lexington

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Adverse Reactions: *Blood dyscrasias* (agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia); *allergic reactions* (erythema multiforme, skin eruptions, Stevens-Johnson syndrome, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis); *G.I. reactions* (nausea, emesis, abdominal pains, hepatitis, diarrhea, anorexia, pancreatitis and stomatitis); *CNS reactions* (headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo and insomnia); *miscellaneous reactions* (drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L.E. phenomenon). Due to certain chemical similarities with some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia. Cross-sensitivity with these agents may exist.

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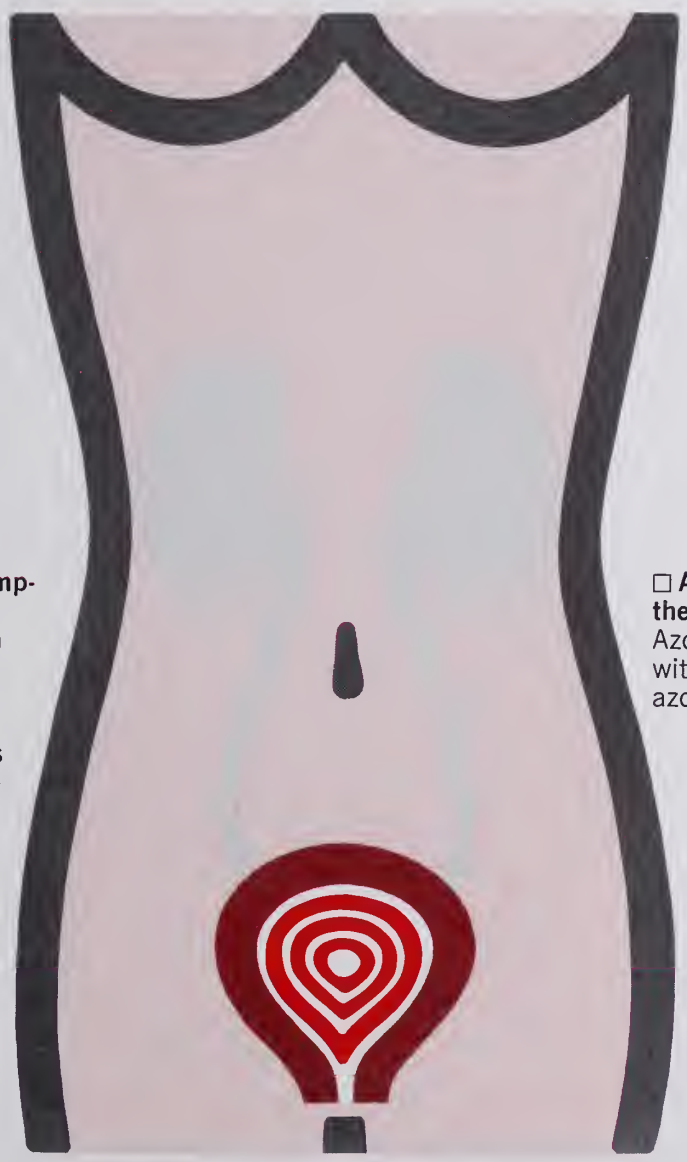
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* **Indications:** *Edema:* That associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. *Mild to moderate hypertension:* Usefulness of the triamterene component is limited to its potassium-sparing effect.

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Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematolog studies in cirrhotics with splenomegaly. Ant hypertensive effects may be enhanced in pos sympathectomy patients. The following ma occur: hyperuricemia and gout, reversible n trogen retention, decreasing alkali reserve wit possible metabolic acidosis, hyperglycemia an glycosuria (diabetic insulin requirements may t altered), digitalis intoxication (in hypokalemia Use cautiously in surgical patients. Concomitar use with antihypertensive agents may result in a additive hypotensive effect. 'Dyazide' interfere with fluorescent measurement of quinidine.

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Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

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VOLUME 74 JULY 1976 NUMBER 7

Screening for Breast Cancer: Where We Are Now†

JERRY B. BUCHANAN, M.D.*

Louisville, Kentucky

At the University of Louisville Breast Cancer Demonstration Project, 80% of women found to have unsuspected breast carcinoma were free of axillary node involvement. Of these lesions, 16% were Stage "O" carcinoma, offering a ten-year survival rate of 95%.

MOST physicians are familiar with the alarming statistics regarding breast cancer. It is the single most prevalent and costly neoplasm in the United States. Approximately 90,000 people will be found to have cancer in the United States in 1976; some 1,200 of these new cases will occur in Kentucky. In the same year, 35,000 persons will die from breast cancer, with approximately 425 deaths occurring in our state. It is the number one cancer killer of American women.

At the same time, breast cancer remains a disease that is most frustrating to treat. Decades of effort have produced only minor reductions in mortality. With occasional exception, the smaller the cancer the less chance there is for spread or metastatic disease. Seven-year follow-up studies from the Guttman Institute in New York[1] have indicated significant benefit from mass screening. Without question, mammography has proved very useful in evaluating the symptomatic breast and promises much as a means of detecting occult breast lesions. Thermography, although currently unproved, may serve as a prescreening tool by identifying the patient at high risk.

With statistics like the above and many unanswered questions, the American Cancer Society and the National Cancer Institute embarked on an unprecedented mass screening program for breast cancer in 1972. Initially, 12 screening centers were to be established throughout the nation; the University of Louisville was among the first three to be funded. These plans were soon revised, and eventually 27 such centers were established. These centers were each to screen 10,000 asymptomatic women between 35 and 74 years of age using breast palpation, x-ray examination, and thermography for five successive years and follow these same 10,000 women over the succeeding five years.

The objectives of the screening program were as follows:

1. to demonstrate the feasibility and practicability of repeated screening for early detection of breast cancer;
2. to identify a target population for future efforts on the basis of risk factors;
3. to evaluate variations in the techniques used; and
4. to explore, and demonstrate wherever possible, the role of allied health professionals in screening.

What are some of the results nationally three years later? Breast cancers are being detected at the rate of 6-8 per 1,000 patients screened. As one might imagine, not all cancers present in the

†*From the Department of Radiology, University of Louisville School of Medicine. This work was supported by NCI-ACS contract No. 1-CN-55307.*
**Chief, Diagnostic Radiology, and Co-Director, Breast Cancer Demonstration Project, University of Louisville School of Medicine, Louisville.*
Received at KMA: 4-20-76

screened population are detected. Current statistics would indicate that one cancer in ten is missed and shows up as an interim cancer before the patient's next screening. Of course, we hope that with new techniques and the refinement of existing ones all cancers will be detected in such a screening program. In Louisville, in the first 60 patients in whom carcinoma was detected, approximately 80% of the women were free of axillary node involvement, offering an 85% five-year survival rate. In the usual symptomatic population with breast cancer, approximately 35% of the women will be free of node involvement. An even more important finding is the detection of 11 lesions (16%) classified as minimal breast cancer. Lesions in this classification have been shown to have a five-year survival rate of 97% and a ten-year survival rate of 95% when treated surgically.

Future target populations are being identified. Parenchymal patterns on the mammograms allow highly accurate prediction of those patients at greater risk. It also seems apparent that those patients with positive thermograms may represent a population at higher risk.

Existing techniques are evaluated and upgraded continually while experimentation with new techniques goes forward. New and improved tubes, image receptors (new screen/film combinations that preserve diagnostic quality while reducing radiation significantly) and entirely new and innovative diagnostic systems for breast disease are either currently being used, now under investigation, or just on the horizon.

Allied health professionals have proved indispensable in undertakings such as this. Trained nurse clinicians and technologists can perform many of the clinical breast examinations. Persons trained as screeners are used in thermographic interpretation, and prescreeners are being used in the interpretation of the x-ray examination. The efficiency and accuracy of their efforts are continually being compared with those of the professional.

At this time, extremely early, non-palpable breast cancers in women of various ages can be detected. Most probably screening does offer the promise of significantly lowering what has been a relatively constant mortality rate. However, it will be several years before survival statistics can be evaluated adequately.

Meantime, the optimal frequency of examinations must be determined and high-hisk groups identified. Hopefully, instead of having to focus on, say, 40 million women over the age of 35, we can identify those at high risk and concentrate efforts on only some four million, thus placing 90% of the cancers in 10% of the population. Only by doing this, can current screening methods make a significant impact on the problem of breast cancer.

Possible Radiation Hazards?

Recently great concern has been expressed about the possible damage from periodic mammography over the next 30 years. These predictions or speculations are based on the assumption that all women over the age of 35 will be screened every year at a fixed dose for the remainder of their lives. The presumption of damage from the repeated, periodic dose of radiation is totally false on at least two counts. First of all, annual screening of all women over 35 is not feasible or practical; indeed it may be a practical impossibility. Secondly, the dose of radiation is continually being lowered through modification of existing techniques and development of new image receptors. For example, in the last ten years, radiation doses dropped from an average of 8-10 rads per exposure to 1 rad per exposure. New rare-earth screen/film combinations allow examination of the breasts at doses in the level of 200-300 millirads. This approaches the levels received from routine chest x-ray examinations.

The recent publicity about dosage and mammography is based on a three-year-old evaluation of scanty data and conclusions so tentative that extrapolations and future predictions are simply not warranted. There was a complete lack of data on the effects of radiation at low levels of dosage to the breast. The data available for human beings are quite limited and most tenuous even for extremely high levels of dosage to the breast. Moreover, the data on which predictions of danger were based were almost entirely for irradiation in young women and girls, whereas our use of mammography has been more or less confined to women over 35 years of age.

No evidence exists that mammography as presently used has ever produced a single breast cancer. In fact, there is no known carcinogenic effect of irradiation at the levels used for mammography. The policy of the American College of Radiology and the goal of radiologists is that for all types of diagnostic radiology, including mammography, the most effective consultation with the least amount of irradiation will be provided.

Mammography is the single most sensitive indicator of early breast neoplasia. Without mammography, approximately 35-50% of potentially curable breast cancers would be missed within the population screened.

Within the decade, high-risk groups will most probably be identifiable, frequency of examinations will be established, and diagnostic systems using either negligible amounts of irradiation or none at all will be available to detect all breast cancers in the curable stage.

Reference

1. Strax, P., Venet, L., and Shapiro, S.: Value of mammography in reduction of mortality from breast cancer in mass screening. *Am. J. Roentgenol. Radium Ther. Nucl. Med.* 117:686-689, 1973.

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Manuscript Memos

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In submitting a manuscript, the author is requested to include a concise summary, not to exceed 35 words, to be used as a sub-title when the article is published in The Journal. The purpose of the summary is to create additional interest and encourage greater readership.

Footnotes and bibliographies should conform to the style of the Quarterly Cumulative Index Medicus published by the American Medical Association. This requires in the order given name of author, title of article, name of periodical, with volume, page, month —day of month if weekly—and year. The Journal of the KMA does not assume responsibility for the accuracy of references used with scientific articles.

All scientific material appearing in The Journal is reviewed by the Board of Consultants on Scientific Articles. The editors may use up to six illustrations with the essayist bearing the cost of all over three one-column halftones.

Arrangements for reprints of an article should be made directly with the publisher of The Journal, Gibbs-Inman Printing Company, 817 W. Market St., Louisville, Ky.

The bylaws of the Kentucky Medical Association provide that all scientific discussions and papers read before the KMA Annual Meeting shall be referred to the KMA Journal for consideration for publication. The bylaws further state that the editor or the associate editor may accept or reject these papers as it appears advisable and return them to the author if not considered suitable for publication.

Please mail your scientific articles to The Journal of the Kentucky Medical Association, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205.

Folic Acid Dietary Deficient Anemia With Reversibility of Positive Coombs Test*

James A. Schroer, M.D. and Robert G. Draime, M.D.
Ft. Thomas, Kentucky

A case of macrocytic anemia is presented. A markedly elevated LDH, bilirubin, and positive Coombs test in the presence of such an anemia should not rule out folic acid or B_{12} deficiency. The value of a detailed dietary history is emphasized.

A 31-year-old white female was admitted to St. Luke Hospital on October 20, 1975, because of a severe macrocytic anemia. For many months she had eaten only fried foods and soft drinks. She could not remember when she had last ingested any milk, fresh fruits, or vegetables.

Past medical history revealed a complete recovery from infectious hepatitis and thrombophlebitis in July 1968. In August 1968, she received one unit of type B, Rh positive blood during the course of female surgery. She had not taken oral contraceptives, any drugs nor alcohol in recent years.

The physical examination was normal except for marked pallor and loss of papillae on the lingual edges.

Abnormal laboratory studies on admission included Hct. 18, MCH 128, WBC 3,100 with hypersegmented nuclei of the neutrophiles, 2% nucleated RBC's, and 2.8% reticulocytes. The total bilirubin was 1.8. The LDH was markedly elevated (over 600) and consistent with a hemolytic component. The serum iron was 134 and the TIBC 186. Both the direct and indirect Coombs tests were positive. Anti-C was positive. The serum folate level was later reported to be 0.6 Mug/ml (normal over 4). Numerous other tests were normal including liver function tests, Schilling test, L.E. prep., cold agglutinins and VDRL. The serum protein electrophoresis was normal except for slight elevation of IgF and IgM. Upper GI series and chest x-ray were normal.

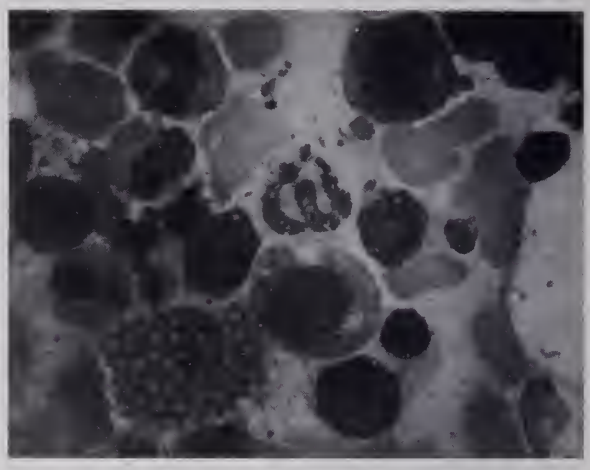


FIG. 1. Photomicrograph I—present are a bizzare band cell, a megaloblast with clumped nucleus and a Mott cell.

Bone marrow aspiration revealed megaloblastoid changes and large bizzare neutrophiles (Fig. 1 and 2).

At first, the patient was thought to have an autoimmune hemolytic anemia. She was given two units of blood and a very short course of Prednisone. After the diagnosis was established she was given 5 mgm of Folic Acid I.M. on October 25, 29, and November 4. On October 29, the Hct. was 37, MCV 108, and reticulocyte count 10%. On November 15, the Hct. was 44 and the MCV 111 with a large population of macrocytes still present. The WBC was 6,500 and the neutrophils were now normal. The reticulocyte count was 3.2%. Both the direct and indirect Coombs test had now reverted to normal. On January 31, 1976, the Hct. was 43 and there was no more macrocytosis. The direct Coombs test was normal and the total bilirubin was 0.6 mgm%.

Discussion

It is common knowledge that megaloblastic anemias due to folic acid deficiency frequently occur in small intestinal disorders, hepatic cirrhosis, and pregnancy. It is also known that some drugs (birth control pills,[1] Dilantin[2]) may

*From the Medical Department, St. Luke Hospital, Ft. Thomas
Received at KMA: 3-23-76*

interfere with folic acid absorption, and that other drugs (pyrimethamine,[3] triamterene,[4] and antimetabolites[5]) may interfere with folate metabolism.

Folic acid deficiency due to improper diet is thought to be rare,[6] but Gough et al think otherwise and reported seven cases.[7]

The minimal daily requirement of folic acid as determined by Herbert[11] is 50 mug. It must be remembered that 50 to 90% of folic acid is destroyed in cooking. With the increasing growth of carry out food shops we may expect an increased number of such anemias.

Since a hemolytic component exists in megaloblastic anemia, elevation of LDH and bilirubin can be expected. Elliott and Fleming[8] state that the high concentration of LDH results from the increased destruction within the marrow of abnormal red-cell precursors with a high enzyme content.

Reversibly positive direct antiglobulin tests have been described in Addisonian pernicious anemia.[9] Parenthetically, Maile[5] regards this as a false positive. A non-specific antiglobulin positivity in megaloblastic anemias (both B_{12} and folic acid deficient) was reported by Forshaw and Harwood.[10]

Since SMA 12 tests have become routine, one may see an elevated LDH and bilirubin in megaloblastic anemias before the peripheral blood film or bone marrow has been evaluated. A positive Coombs test may be present in both hemolytic and megaloblastic anemias. Therefore, at first glance, folic acid deficiency anemia and pernicious anemia may be confused with hemolytic anemia.

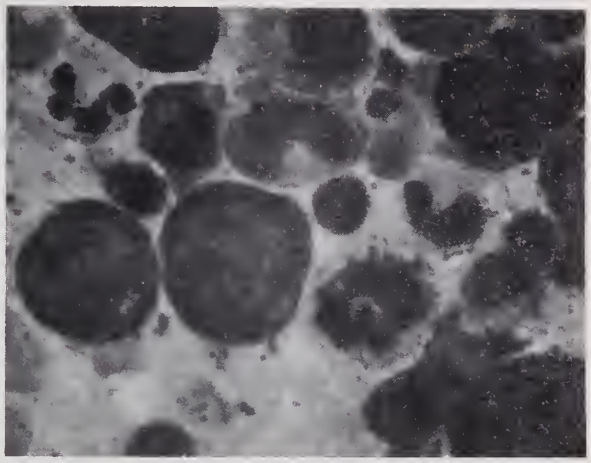


FIG. 2. Photomicrograph II—large band cell, polychromatic megalocyte and a pair of basophilic megaloblasts.

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GRAND ROUNDS

The University of Louisville School of Medicine

This Journal feature will be presented alternately by the University of Louisville and the University of Kentucky Departments of Medicine and Departments of Surgery. We hope to have these features revolve around subjects of immediate practical interest to the practicing physician; and, for those of us not able to attend grand rounds in the teaching centers as often as we might, we hope this will represent a bit of a refresher course.

Neurofibrosarcoma Complicating von Recklinghausen's Disease*

MULTIPLE neurofibromatosis, a disease of ectodermal origin, was first described by Smith in 1849, although the classic description of the syndrome was not published until 1882 by von Recklinghausen.[1] The disease is transmitted by an autosomal dominant gene with a frequency of one case per 2,500-3,000 live births. Known for its protean manifestations, the disease is characterized by cafe-au-lait spots, cutaneous fibromas, and neurofibromas involving the peripheral nerves.[2]

The neurofibromas can occur in any part of the craniocerebral axis as well as the peripheral nerves. Lesions have also been described in skin, bladder, blood vessels, bones, stomach, ileum, colon, and the tongue. The severity of the cutaneous lesions bears no relationship to the presence of the disease in other organs.

The most serious of the many variable presentations of von Recklinghausen's disease, if not the most common, is that of sarcomatous transformation, a complication encountered recently in a patient at the University of Louisville Affiliated Hospitals.

Case Presentation

A 37-year-old Caucasian man with known multiple neurofibromatosis was first referred in October 1975 with a chief complaint of pain radiating down his left leg. In 1956 he had noticed a large mass in his right forearm. His physician excised this mass and told him it was the type of tumor that could become malignant. A few months later he sought consultation at Vanderbilt University Medical Center, and the diagnosis of von Recklinghausen's disease was confirmed. The patient was not seen again until 1968 when, during an examination for an unrelated illness, an abdominal mass was found. This seemed to increase in size, and in 1970 he underwent exploratory laparotomy. An incisional biopsy was done and the tumor was said to be a benign neurofibroma. Since 1973, the left-sided, intra-abdominal mass had grown rapidly, with associated increase in hip and thigh pain and weakness of the extremity.

The patient also noted intermittent bright red rectal bleeding during the last five years. There was no history of neurofibromatosis in his five siblings or his parents. Both of the patient's children, however, are afflicted with neurofibromatosis and cafe-au-lait spots.

Physical examination disclosed an anemic 37-year-old man with multiple cafe-au-lait spots and hundreds of cutaneous neurofibromas. Arterial blood pressures on admission varied from 140/90 to 160/100 mm Hg. A large firm, fixed mass occupying the entire left side of the abdomen and flank could be palpated. The largest diameter of the left thigh was 46 cm; in the right thigh it was 49 cm. There was decreased sensation to pin prick and light touch in the medial aspect of the left thigh. Chest x-ray film, upper gastrointestinal and small bowel series, and proctosigmoidoscopy were all normal. Barium enema showed gross displacement of the descending colon, and the intravenous pyelogram disclosed a 16 x 13 cm mass in the left flank displacing the left kidney. Calcifications in the area of the right adrenal were also noted. Abnormal laboratory values included an iron-deficiency anemia with a hemoglobin of 9.5 gm% and a 24-hour urine vanillylmandelic acid (VMA) of 13.4 μg/100 ml with a normal range of 5-12 μg/100 ml. Renal arteriograms were obtained as part of the examination for hypertension and

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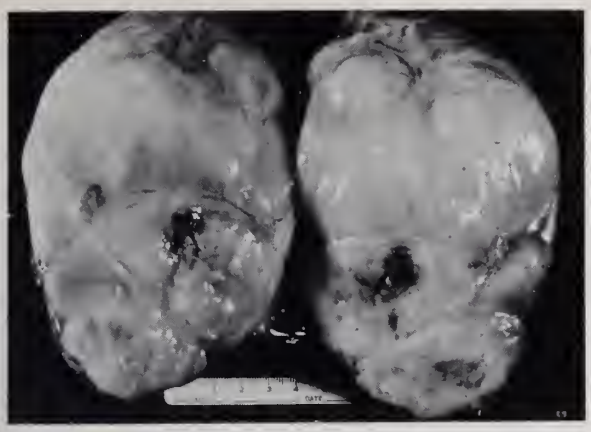


FIG. 1. Wide dissection of gross tumor weighing 1,150 gm.

showed no angiographic evidence of an adrenal tumor, although minimal stenosis of the superior right renal artery was demonstrated.

On October 24, 1975, re-operation was undertaken (H.C.P.). No metastatic lesions were identified. The mass was fixed into the left paraspinal area grossly displacing the left kidney upward. The left colon was reflected and the well-encapsulated mass resected with a margin well away from the "capsule." The lesion appeared to arise from the lumbar nerve root; that root was deliberately sacrificed to achieve removal of all gross tumor. The aorta was uninvolved. Blood replacement was 500 ml.

The postoperative course was most benign. The patient's narcotic requirement abated, and he showed excellent adaption to the sacrifice of the lumbar root and on careful examination reflected a 50% reduction in strength of psoas and thigh flexors.

He was subsequently re-admitted in February 1976 and found to have no evidence of neoplastic disease. The VMA determinations were in the normal range, and his blood pressure in the hospital never exceeded 140/80. Pursuit of the minimal renal artery lesion was abandoned, and no adjunctive treatment is planned for his neoplasm at this time.

Discussion

Even though von Recklinghausen's disease is transmitted by an autosomal dominant gene, a strong family history is not always present. The gene has a variable degree of penetrance resulting in great differences in the clinical picture—from the full, generalized syndrome to the incomplete, monosymptomatic form. Other reasons that family histories may not be positive are that relatives may only develop the clinical signs late in life, the disorder may be very mild and remain clinically unrecognized, and a few cases may result from spontaneous gene mutation.[3]

The presence of hypertension in a patient with neurofibromatosis is usually thought to represent an associated pheochromocytoma. However, a more common reason for hypertension in patients with von Recklinghausen's disease is arterial lesions. Hypertension secondary to aortic and/or renal artery constriction by neurofibromatous tissue has been reported, but in recent years the association between neurofibromatosis and a variety of intrinsic vascular lesions involving the renal arteries has received considerable emphasis. Some investigators believe that vascular neurofibromatosis is always a part of this disease and can be found in almost all instances if sought after systematically.[1]

These vascular lesions have been characterized as three types.[1] With the first type there is intimal proliferation in concentric layers, eventually obliterating the lumen. The second type includes cortical thickening with atrophy of the muscular layer into disorganized islands eventually leading to aneurysmal formation. The third is the nodular form in which cellular nodules form the wall of the vessels. These changes may be features of the damaged control of growth and proliferation of fibrous tissue exposed as skin and nerve tumors, cystic lesions of bones, and a variety of alterations in the structure of blood vessels.

The patient described herein also represents the clinical syndrome of neurofibromatosis with respect to gastrointestinal bleeding and chronic anemia. Visceral neurofibromatosis can present dramatically with intestinal obstruction progressing to encroachment, intussusception, or volvulus, but more often presenting as chronic anemia attributable to chronic gastrointestinal blood loss.[4,5] Involvement the small bowel is common but involvement of the colon other than the lower rectum and anus is rare. The overall incidence of gastrointestinal tract involvement has been estimated to be 6-8%.[5] The lesions usually consist of multiple nodular or polypoid masses of various sizes located mainly in the submucosa and mucosa. Occasionally, extension into the muscular coat, serosa, and mesenteric fat is noted. Malignant change is estimated to occur in 10-15% of patients with segmental neurofibromatosis of the gastrointestinal tract.[4]

The most dreaded complication of the multiple



FIG. 2. Low-power photomicrograph showing marked cellularity of the tumor.

neurofibromatosis syndrome, malignant transformation may be associated with gastrointestinal tract lesions but more often represents the sarcomatous transformation of one of the benign peripheral nerve tumors.

Das Gupta and colleagues estimate that 69% of children born with signs of neurofibromatosis will have one or more benign schwannomas by age 20, and 19% will develop malignant schwannomas in the next 20 years. They further state that among patients who present after age 25 the incidence of a malignant nerve tumor will be even higher.[2,6] Malignant neurilemma, neurogenic sarcoma, neurosarcoma, and malignant schwannoma are synonymous terms used for this malignant transformation.[7] Their origin has been traced to Schwann's cells of the nerve sheath, as described by Verocay in 1910.[8]

In the several reviews of von Recklinghausen's disease, sarcomatous transformation has been reported to occur in 13-29% of patients.[8] This transformation should be suspected when there is an increase in size or change in shape of a tumor mass. A rapidly growing tumor usually indicates a high degree of cellularity and a very poor prognosis. D'Agostina and co-workers have published the largest review of cases.[9] In 678 patients with neurofibromatosis, they found 21 patients with sarcoma: 12 had neurofibrosarcoma, three rhabdomyosarcoma, one liposarcoma, and five unclassified sarcoma.

The patient with neurofibrosarcoma typically will present with a long history of known neurofibromatosis. On average, he will be in his middle 30's, will usually complain of the recent enlargement of a known mass which may be associated with pain, paresthesia, or hypothesia, and generally will have been aware of the mass for two to four years.

These tumors tend to originate in the deeper tissues of the body, along the course of major nerve trunks and grow slowly. Rarely, if ever, does sarcomatous degeneration occur in a cutaneous lesion. The sarcomas tend to recur locally and spread via the blood stream, with most patients dying of pulmonary metastases.[10]

The outlook for patients with neurofibrosarcoma is generally poor; most studies report a five-year survival rate of approximately 30%. Wide surgical excision, including amputation and disarticulation as necessary, has proved the most acceptable and effective treatment. The surgeon should not be misled by the usually distinct capsule; this is actually compressed tumor tissue and a "shelling out" of the tumor must not be done.[10]

How overall survival of patients with soft tissue sarcomas can be improved is generally an unsolved problem.[8] Several recent articles have reported various combinations of surgical treatment, both radical and limited, as well as single-drug chemotherapy and irradiation.[11-14] Some preliminary reports are promising; those describing limited operation and split-dose irradiation may be particularly beneficial with regard to maintaining essentially normal limb function.[14] Whether prolonged survival will be improved is not yet known.

The present patient is described in detail, not because his illness presented such a challenging technical problem, but because he exemplified many of the interesting ramifications of von Recklinghausen's disease, a syndrome known to all physicians but seldom thought of as anything but a cosmetically undesirable condition. The patient described possessed many of the charac-

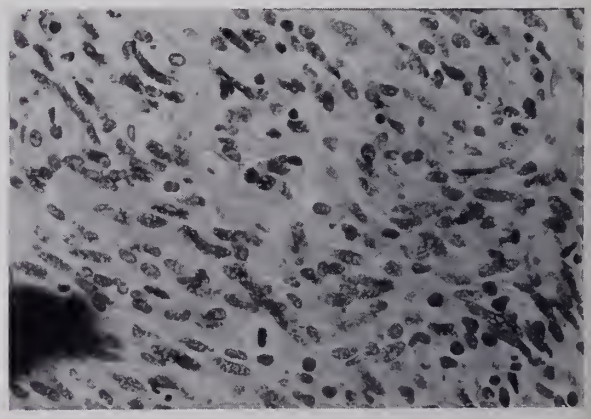


FIG. 3. High-power photomicrograph showing frequent mitosis and marked nuclear pleomorphism indicating high degree of malignancy.

teristics of the disease other than cutaneous lesions, including positive family history, gastrointestinal bleeding with anemia, hypertension, and neurofibrosarcoma. Such patients should be reexamined at least yearly, with any changing mass or neurologic symptom carefully investigated. Genetic counseling is also of utmost importance.

Summary

A man with multiple neurofibromatosis complicated by a) arterial hypertension, b) chronic gastrointestinal bleeding, and c) sarcomatous transformation of a retroperitoneal neurofibroma is presented. Clinicians must appreciate the protean and rarer manifestations of neurofibromatosis along with the characteristic features such as cafe-au-lait spots and cutaneous neurofibromata.

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Acknowledgement

T. F. Connally, M.D., Bowling Green, initially diagnosed this patient's illness. H. S. Nagaraj, M.D., and Timothy Canty, M.D., participated in the evaluation of the patient's children.

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MARK YOUR CALENDAR

KMA ANNUAL MEETING

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EDITORIAL

The Periodic General Examination

Every physician who spends much or part of his time and effort performing periodic general physical and laboratory examinations frequently wonders how much good he is doing. There is and certainly should be much careful assessment in an effort to define the most direct and economical means of periodic surveys to best benefit asymptomatic patients who undergo periodic examinations either at their employer's direction or because of their own firm belief in a "preventive medicine."

A panel presentation entitled "The Routine Physical Examination—'The Opiate of the Masses'—Is It Worth What It Costs?" was presented on the program of the Tennessee Society of Internal Medicine at a joint meeting with the American College of Physicians, Tennessee-Kentucky Regional Meeting in October, 1975. The most clearly cost effective and the prototype of the cost effective laboratory test was the serologic test for syphilis. *Probably* cost effective were screening for cancer of the cervix and breast, urine analysis, blood count, BUN, blood sugar, stool occult blood, and SGOT. Probably *not* cost effective were the remainder of multichannel blood tests, tonometry, chest x-rays, and electrocardiogram. These observations are surprising.

The physician performing the examinations has his firm notions as to what is valuable and productive. He also must deal with the opinions of the employer who has developed his requirements of what are beneficial studies. Most patients have their own strong opinions about the detail and quality of periodic examinations. Whether such examinations are worth the cost and effort is further confused by the large number of patients who believe and receive great reassurance from examination and appear for them regularly even when discouraged by the examiner. Another large population of patients cannot be coerced into visiting the doctor regardless of how essential all will agree that the examination is.

The asymptomatic patient who clearly benefits from periodic survey, whose health is improved, or whose life is saved, comes sufficiently frequently in the experience of all of us that we feel sure that the exercise is not valueless. Surely all concerned, consumers and physicians, would be delighted to know which maneuvers are proven good and which, worthless. Until these obviously clear, scientifically proven decisions have been made, each physician will have to deal honestly and efficiently with his patients as his best judgement will dictate.

AEO

FROM THE EDITOR'S NOTEBOOK

Notes of medical and professional interest from a cross-section of America's journals.

More Diabetics

In the April issue of *Archives of Internal Medicine* it is reported "diabetes incidence seems to be increasing by 6% each year in the United States, affects as many as 10 million Americans, and should be ranked third behind cardiovascular disease and cancer as a cause of death in this country." Very impressive! And with so many diabetic patients about, how should they be treated? If strict control helps prevent infection and ketoacidosis, does it help prevent microvascular complications?

The answers to this question is covered in an editorial of the *New England Journal of Medicine* 294:1004—"The goals of appropriate therapy should thus include a **serious effort** to achieve levels of blood glucose as close to those in the nondiabetic state as feasible." George F. Cahill and the authors believe this concept is particularly applicable to the young and middle-aged diabetic who have the greatest risk of microvascular complications. And finally the conclusions outlined in the editorial "have been accepted as policy by the American Diabetes Association with the belief that the weight of evidence, particularly that accumulated in the past five years, strongly supports the concept that the microvascular complications are decreased by reduction of blood glucose concentrations." **How serious is your effort?**

Acute Pulmonary Edema

The Editorial Notes on the Emergency Management of Acute Pulmonary Edema by Grossman and Aberman (*Annals of Internal Medicine* 84:488 - April 1976) impressed me most favorably. They emphasize that **morphine and oxygen remain the center of treatment** for pulmonary edema secondary to left ventricular failure and some **new treatment approaches may produce undesirable consequences.** They cite one study that "found no improvement in mortality when acute pulmonary edema was treated in the intensive care unit as compared with being treated in the ward." Despite the frequency of lactic acidosis and carbon dioxide retention, **intravenous bicarbonate and endotracheal intubation are rarely necessary. Diuretics are valuable** adjuncts to treatment and patients may improve before or without a diuretic response; furosemide decreases venous tone, a "pharmacologic phlebotomy." **But diuretics are not without hazard** and a vigorous response to their use may produce a shocklike syndrome with hypotension, clouding of consciousness, and oliguria requiring treatment by re-expansion of plasma volume.



Testing in Humans: Who, Where & When.

the weight of ethical opinion:

Few would disagree that the effectiveness and safety of any therapeutic agent or device must be determined through clinical research.

But now the *practice* of clinical research is under appraisal by Congress, the press and the general public. Who shall administer it? On whom are the products to be tested? Under what circumstances? And how shall results be evaluated and utilized?

The Pharmaceutical Manufacturers Association represents firms that are significantly engaged in the discovery and development of new medicines, medical devices and diagnostic products. Clinical research is essential to their efforts. Consequently, PMA formulated positions which it submitted on July 11, 1975, to the Subcommittee on Health of the Senate Labor and Public Welfare Committee, as its official policy recommendations. Here are the essentials of PMA's current thinking in this vital area.

1. PMA supports the mandate and mission of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research and offers to establish a special committee composed of experts of appropriate disciplines familiar with the industry's research methodology to volunteer its service to the Commission.

2. PMA supports the formation of an independent, expert, broadly based and representative panel to assess the current state of drug innovation and the impact upon it of existing laws, regulations and procedures.

3. When FDA proposes regulations, it should prepare and publish in the *Federal Register* a detailed statement assessing the impact of those regulations on drug and device innovation.

4. PMA proposes that an appropriately qualified medical organization be encouraged to undertake a comprehensive study of the optimum roles and responsibilities of the sponsor and physician when company-sponsored clinical research is performed by independent clinical investigators.

5. PMA recognizes that the physician-investigator has, and should have, the ultimate responsibility for deciding the substance and form of the informed consent to be obtained. However, PMA recommends that the sponsor of the experiment aid the investigator in discharging this important responsibility by providing (1) a document detailing the investigator's responsibilities under FDA regulations with regard to patient consent, and (2) a written description of the relevant facts about the investigational item to be studied, in comprehensible lay language.

6. In the case of children, the sponsor must require that informed consent be obtained from a legally appropriate representative of the participant. Voluntary consent of an older child, who may be capable of understanding, in addition to that of a parent, guardian or other legally responsible person, is advisable. Safety of the drug or device shall have been assessed in adult populations prior to use in children.

7. PMA endorses the general principle that, in the case of the mentally infirm, consent should be sought from both an understanding subject and from a parent or guardian, or in their absence, another legally responsible person.

8. Pharmaceutical manufacturers sponsoring investigations in prisons must take all reasonable care to assure that the facilities and personnel used in the conduct of the investigations are suitable for the protection of participants, and for the avoidance of coercion, with a respect for basic humanitarian principles.

9. Sponsors intending to conduct non-therapeutic clinical trials through the participation of employee volunteers should expand the membership and scope of its existing Medical Research Committee, or establish such an internal Medical Research Committee, with responsibility to approve the consent forms of all volunteers, designs, protocols and the scope of the trial. The Committee should also bear responsibility to ensure full compliance with all procedures intended to protect employee volunteers' rights.

10. Where the sponsor obtains medical information or data on individuals, it shall be accorded the same confidential status as provided in codes of ethics governing health care professionals.

11. PMA and its member firms accept responsibility to aid and encourage appropriate follow-up of human subjects who have received investigational products that cause latent toxicity in animals or, during their use in clinical investigation, are found to cause unexpected and serious adverse effects.

12. PMA supports the exploration and development by its member companies of more systematic surveillance procedures for newly marketed products.

13. When a pharmaceutical manufacturer concludes, on the basis of early clinical trials of a basic new agent, that a new drug application is likely to be submitted, a proposed development plan accompanied by a summary of existing data, would be submitted to the FDA. Following a review of this submission, the FDA, and its Advisory Committee where appropriate, would meet with the sponsor to discuss the development plan. No *formal* FDA approval should be required at this stage. Rather, the emphasis should be on identification of potential problems and questions for the sponsor's further study and resolution as the program develops.

The PMA believes that health professionals as well as the public at large should be made aware of these 13 points in its Policy on Clinical Research. For these recommendations envisage constructive, cooperative action by industry, research institutions, the health professions and government to encourage creative and workable responses to issues involved in the clinical investigation of new products.

P·M·A
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Washington, D. C. 20005

SPECIAL ARTICLES

Progress Being Made In Hemophilia Treatment

W. H. Matthew, M.D.*

Hemophilia is a genetic disease that prevents normal blood clotting and can result in severe hemorrhage. This bleeding can occur in any system of the body, but the most common and crippling bleeding occurs in joint cavities. Approximately 350 persons in Kentucky are thought to suffer from this disease.

Factor VIII Deficiency (classic hemophilia), which is a sex-linked recessive disease, affects approximately 90% of those that suffer from hemophilia. The gene of course affects only males but is passed by mothers to their sons. Approximately 50% of males born to a carrier mother theoretically are affected. The male hemophiliac is unable to pass the gene to his sons, because it is carried on the chromosome, but all of his daughters receive the trait, which they can in turn pass on to their sons.

Facter IX Deficiency, Christmas Disease, which is genetically passed the same as Factor VIII, makes up approximately 9% of the population of hemophiliacs. The other 1% consists of patients with other blood factor deficiencies (ie, Factor XI and VII). These deficiencies are usually autosomal recessive and can affect both male and female. Von Willenbrand's Disease, which is a combination of Factor VIII Deficiency and platelet inadequacy, is genetically autosomal dominant affecting males and females, and is characterized by a wide range of expressivity.

Hemophilia is known to have existed for many centuries, certainly back to the beginning of written history. No real treatment existed until the advent of plasma products. The greatest step was in 1962 when Dr. Judith Poole developed the product of cryoprecipitation, which separates the coagulation factors into a smaller volume from the plasma. Since that time freeze-dried concentrates for Factor VIII and Factor IX have been developed in order to individualize therapy. Even with treatment possible, there is still a problem with availability of blood products and the tremendous cost in their production. Most persons cannot afford to pay for these blood factors which in many cases are needed on a weekly or daily basis.

Public Law 94-63 passed by the Congress last fall will appropriate funds to set up Hemophilia Demonstration Centers and Blood Separation Centers in the United States. These centers will make hemophilia treatment including blood products and concentrate more accessible to patients that suffer from bleeding disorders. Fifteen states including Kentucky have established state hemophilia treatment programs.

The Kentucky Legislature passed a law this year which establishes a Hemophilia Advisory Committee to the Bureau of Health Services, and appropriates $150,000 per year for the next two years, which will help finance the cost of blood products and other treatment needed by hemophiliacs that have no other adequate health coverage.

The Hemophilia Advisory Committee will consist of members appointed by the Governor's office, and will have representatives from the Kentucky Medical Association, the Kentucky Hospital Association, hemophiliac patients, and health providers that are involved with hemophilia treatment.

A Hemophilia Symposium and Demonstration Workshop was held this year in Louisville. The purpose of this conference was to acquaint interested health professionals with the progress being made in the treatment of hemophilia.

Hopefully, in the near future, hemophilia treatment centers will be developed throughout Kentucky and adequate health care will be available to patients with genetic bleeding disorders in all sectors of the state.

The present facilities that are available as listed in the National Hemophilia Foundation Directory of Hemophilia Centers are:

Lexington
University of Kentucky Medical Center
800 Rose Street
Lexington, Kentucky 40506
(606) 233-5000
Physicians in charge—John J. Hutton, M.D. (adult)
Phillip Holland, M.D. (pediatrics)

Louisville
Louisville Children's Hospital
200 East Chestnut Street
Louisville, Kentucky 40202
(502) 589-8000
Physicians in charge—Donald R. Kmetz, M.D.
C. C. Patel, M.D.

* *Medical Advisor, Eastern Kentucky Hemophilia Society, Whitesburg*

Louisville General Hospital
323 East Chestnut Street
Louisville, Kentucky 40202
(502) 589-4321
Physician in charge—Yong K. Liu, M.D.

Whitesburg
Whitesburg Appalachian Regional Hospital
Jenkins Road
Whitesburg, Kentucky 41858
(606) 633-2211
Physician in charge—W. H. Matthew, M.D.

Directory Hemophilia Treatment Centers, 1975, The National Hemophilia Foundation, 25 West 39th Street, New York, New York 10018.

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MATERNAL MORTALITY



From the Files of the KMA Maternal Mortality Study Committee

—Edited by John W. Greene, Jr., M.D.

11-73. The patient was a 28-year-old, Gravida 4, Para 3, with an expected date of confinement to be the last part of November 1972. The present pregnancy has been uneventful as was her past medical history. All three previous deliveries occurred at another hospital. The largest infant weighed 8 lbs 3 ozs.

On October 1, 1972, she presented in the emergency room for possible premature onset of labor. She was complaining of lower abdominal pain. A history was obtained of her having been nauseated and not eating. No bowel movement for several days. She appeared to be in distress and the uterus was thought to be of 7 or 8 months size, and non-tender. The lower abdomen was tender but no rebound tenderness could be elicited. The fetal heart tones were good. The vaginal examination revealed the cervix to be closed and uneffaced. There was no vaginal bleeding. Pain was not explainable at this time.

A complete blood count showed a hemoglobin of 11.7 gms, Hct of 33%, her white count was 13,100. The differential was significant in that she had 78 polys, 9 stabs, 10 lymphs, and 3 monos. She was admitted to the hospital and given a sedative. A repeat count revealed a hemaglobin of 11.9 gms, Hct. 33, a white count of 15,200, with 39 polys, 52 stabs, 8 lymphs and 1 monocyte. The urine revealed a 3 + bacteria, a trace of sugar, trace of protein, and small amount of acetone.

In the hospital the patient did have some vomiting, and felt nauseated. Another physician saw the patient and felt that observation was all that was warranted at this time. She was no longer acutely ill and was discharged from the hospital, requiring no pain medication.

The patient returned that evening, October 3, thinking that she was in labor with abdominal pain. She was admitted and complained of some nausea and cramping of the lower abdomen. There was no diarrhea, chills, or fever. Surgical consultation was obtained. Her vital signs were normal in that her pulse rate was 120 and her respiratory rate was 40. She was in some mild distress. The abdomen was somewhat distended, but was soft. There was no rebound, guarding, or rigidity. The vaginal examination showed the cervix to be 3-4 cm dilated, but the presenting part was quite high in the pelvis. Her temperature was 100.2°. She vomited and received sedation. Hgb. 12.7 gms, Hct. 37%, the white count at this time was 7700, with 64 polys, 20 stabs, 15 lymphs, and one mono.

At 11 a.m. repeat blood count was essentially the same. Temperature at this time was 100.6°. At 5 p.m. the following day her temperature was 100.8°. Her abdomen was described as moderately tense. She seemed drowsy later in the evening and her vital signs were normal except for the temperature which was 100. The nasogastric tube was inserted. The impression at that time was toxemia with possible gram negative septicemia, possible pulmonary emboli. The white count this evening was 23,000, 46 polys, 30 stabs, 21 lymphs, 3 monos, and she had 2 + toxic granulation tissue.

Portable chest x-ray was obtained and films of the abdomen were ordered. She was started on broad spectrum antibiotics, and a Foley catheter was inserted. She was given supportive intravenous fluids. Blood cultures were ordered. Temperature was 104 later in the day. Her blood pressure did not respond to vaso-constrictive drugs. She was given Glucocorticoid and additional antibiotic therapy. However she expired on the 10th of October, 1973.

An autopsy was requested but could not be obtained. Blood cultures that were drawn on the 9th, revealed bacteroides with no aerobic growth. The cause of death is listed as bacterial sepsis.

Comment

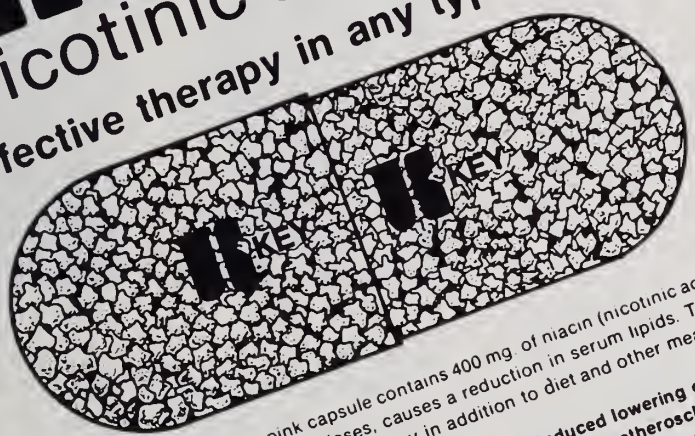
The Committee on Maternal Mortality classified this as an obstetrical death with preventable factors. It would seem from reading the protocol that appendicitis with rupture, subsequent peritonitis would be a likely diagnosis. In a recent paper by Cunningham and McCubbin *(Obstetrics and Gynecology,* 45:415, 1975) appendicitis complicating pregnancy is discussed. It is emphasized in their paper in the study of 34 patients over a 15-year period that if the diagnosis of appendicitis is suspected in a pregnant woman, immediate surgical intervention is indicated. They quote Babler in 1908, stating "the mortality of appendicitis complicating pregnancy is the mortality of delay." There is an increase in mortality as gestation progresses. The maternal mortality rate can approach 10.9% and 16-17% of the disease occurred intrapartum or postpartum. Disease can be quite difficult to diagnose, but when suspected it would seem that laparotomy should be carried out. There was strong evidence that this was the case described above, particularly with the white counts supportive as they were.

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CONTRAINDICATIONS: Niacin is contraindicated in patients with hepatic dysfunction or in patients with active acute peptic ulcer.

WARNINGS: The use during pregnancy and lactation or in women of childbearing age requires careful weighing of potential benefits versus possible hazards to the mother and child. There are insufficient studies done for usage in children.

PRECAUTIONS: Patients with diabetes, gall bladder disease, past history of jaundice, liver disease, or peptic ulcer should be observed closely. At initial stage of therapy, liver function and blood glucose should be monitored at frequent intervals. Adjustment of diet and/or hypoglycemic therapy may be necessary. Patients undergoing antihypertensive therapy may experience an added vasodilating effect with resulting postural hypotension. Use with caution in patients predisposed to gout.

ADVERSE REACTIONS: Severe flushing, decreased glucose tolerance, activation of peptic ulcer, abnormal liver function tests, jaundice, gastrointestinal disorders, dry skin, pruritus, hyperuricemia, toxic amblyopia, hypotension, transient headache.

DOSAGE AND ADMINISTRATION: The dose and frequency for the administration of NICO-SPAN should be adjusted to the response of the patient. Slow build-up of dosage in gradual increments is recommended to observe efficacy and/or adverse effects. One or two capsules three times a day is the usual dosage. The maximum daily dosage is 6 grams.

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ORGANIZATION SECTION

Out-of-State Guest Speakers, Kentucky Physicians To Appear On Program of 1976 KMA Annual Meeting, Sept. 28-30

Participating with Kentucky physicians on the scientific program of the 1976 KMA Annual Meeting will be well-known authorities from across the nation. The four general sessions will take place September 28-30 at the Ramada Inn/Bluegrass Convention Center in Louisville.



Mr. McConnell

The annual session, which actually opens on Sunday, September 26, with a meeting of the KMA Board of Trustees followed by the first session of the House of Delegates on Monday, September 27, has many timely features of interest to the practicing physician.

The general sessions will deal with such subjects as emergency care, infectious diseases, and breast problems and will be supported by meetings of 17 specialty groups.

Always a highlight of the Annual Meeting is the President's Luncheon, to be held on Wednesday, September 29, at 11:50 a.m. in the Bluegrass Convention Center. J. Ed McConnell, President, Blue Cross, Blue Shield and Delta Dental of Kentucky, will provide an entertaining presentation of "Kentucky—My Kentucky—Fifty States in the Bicentennial Year."

Mr. McConnell first joined Blue Cross and Blue Shield in 1942 and was elected President in 1967. He is the recipient of numerous awards, including the Kentucky Medical Association Award in 1972, and has been active in professional and civic clubs, having been president of the Kentucky Chamber of Commerce, Louisville Chamber of Commerce, and Louisville Rotary Club.

Other features of this year's session include the annual convention of the Auxiliary to KMA, University of Louisville School of Medicine alumni reunions, more than 75 scientific and technical exhibits, and the annual KEMPAC Seminar.

Two of the speakers on the Wednesday, September 29, afternoon session dealing with "Infectious Diseases," are Arthur C. White, M.D., Indianapolis, and William A. Altemeier, M.D., Cincinnati.

Doctor White, Professor of Medicine and Director of the Infectious Disease Division at Indiana University School of Medicine, will speak on "Recent Advances in Antibiotic Therapy." A former assistant professor at the University of Louisville, Doctor White is a member of the Advisory Panel on Infectious Disease Therapy on the General Committee of Revision of the U.S. Pharmacopeia. He is a member of numerous medical organizations and author and co-author of a great many articles on infectious diseases.



Doctor White



Doctor Altemeier

Speaking on "Antibiotic Prophylaxis in Clean Surgery," Doctor Altemeier is the Christian R. Holmes Professor of Surgery and Chairman of the Department, at the University of Cincinnati. He serves on the HEW Intersociety Committee on Antibiotic Usage and is a former president of the American Surgical Association, the Central Surgical Association, and the Society for Surgery of the Alimentary Tract. Doctor Altemeier serves on numerous editorial boards, including *Annals of Surgery, Surgery* and *Journal of Surgical Research.*

Complete details of the 1976 KMA Annual Meeting, including the final scientific program, will be featured in the August issue of *The Journal.*

CME Requirements Approved, Hearing Set For Aug. 26

At the May 27 meeting of the Kentucky State Board of Medical Licensure, requirements for participation in continuing medical education were approved. When implemented by state regulation, all physicians in the state will be required to participate in order to re-register their licenses to practice medicine in the state.

Continuing medical education requirements by specialty were originally submitted to the Licensure Board by the KMA Medical Education Committee and were reviewed and modified by a Special Study Committee of the Board. The Committee was composed of members of the Licensure Board, the Medical Education Committee and a representative from each of the two medical schools.

Tentatively, the CME program will become effective January 1, 1977, and will require all physicians to obtain 150 credit hours per triennium. A minimum of 60 credit hours will be required in AMA-approved programs

which are classified as Category I activities and preferably pertinent to the physicians designated specialty.

The Board has submitted a proposed regulation to the State Legislative Research Commission. The regulation will be printed in the August edition of the State Administrative Register along with a meeting notice that a public hearing has been scheduled for August 26. The hearing will be held for the purpose of giving all interested parties an opportunity to voice their opinion.

The August 26 hearing will take place in the Jeffersonian Room at the Ramada Inn (I-64 at Hurstbourne Lane) in Louisville at 3:00 p.m. (EDT).

The Licensure Office will be sending all physicians in the state a copy of the proposed regulation along with a meeting notice.

CME Award Available To AMA Members

Physicians may now apply for the AMA Physicians Recognition Award at any time, rather than on a three-year cycle. In the past six years, 64,149 physicians have qualified for the CME award.

Beginning this year, AMA members will pay no application fee toward the Award. Non-members will be charged $25.

Newest KMA Staff Member Is Joseph Witherington

Joseph A. Witherington, Jr., a 26-year-old Louisville native, joined the staff of the Kentucky Medical Association on June 21. He will be working closely with members of the Executive staff in performing administrative duties of the Association, to include work on many KMA committees. Further activities will include the promotion of numerous health education and public service programs.



Mr. Witherington

Mr. Witherington, prior to coming to KMA, was Public Health Advisor for 44 Kentucky counties with the U.S. Center for Disease Control. He was responsible for supervising and establishing V.D. control training programs for various Health Departments. A 1972 graduate of the University of Louisville, Mr. Witherington is married and has one child.

On June 1, former KMA Director of Legislative Activities, Jerry E. Mahoney, became the Executive Vice President of the Kentucky Savings and Loan League, based in Louisville. Mr. Mahoney, who had been with KMA for seven years, guided KMA state legislative lobbying activities, served as Managing Editor of *The Journal*, and had staffing responsibility for several KMA committees.

1976 Scientific Program Outline Released for Annual Meeting

The following preliminary scientific program for the 1976 KMA Annual Meeting has been released. Each half-day session of the three-day program will feature a 30-minute intermission so physicians may visit the scientific and technical exhibits.

TUESDAY, SEPTEMBER 28—Morning Session

Theme: "Emergency"

Opening Ceremonies

"The Heimlich Maneuver—Scientific Background and Update"—Henry Heimlich, M.D., Cincinnati

"Airway Resuscitation Devices"—Peter Chodoff, M.D. Baltimore

"Recognition of Disease States of the Oral-Paraoral Structures Requiring Early Management"—Norbert Burzynski, D.M.D., Louisville

"Emergency Care and Treatment of Trauma of the Cervical Spine"—J. William Fielding, M.D., New York City

"American Trauma Society— Lessons Learned from Cancer and Coronaries"—Thomas Morse, M.D., Columbus

"Aggressive Resuscitation of the Nearly-Drowned Patient"—Martin Nemiroff, M.D., Ann Arbor

"Emergency System"—Ronald Krome, M.D., Detroit

Nine of the 17 participating specialty groups will meet simultaneously at 1:30 p.m. No general scientific session will be held at that time.

WEDNESDAY, SEPTEMBER 29—Morning Session

"Disseminated Intravascular Coagulation"—Stanley Robboy, M.D., Boston

"The Management of Renal Trauma"—Ian Thompson, M.D., Columbia, Mo.

Theme: "Breast Problems"

"Augmentation Mammoplasty"—Raleigh Archer, M.D., Lexington

"Mammography and Radiation Hazards"—Jerry Buchanan, M.D., Louisville

"Adjuvant Chemotherapy for Breast Cancer"—John Durant, M.D., Birmingham

"Breast Cancer and its Treatment: An Holistic Approach"—Danielle Turns, M.D., Louisville

Afternoon Session

Theme: "Infectious Diseases"

"Recent Advances in Antibiotic Therapy"—Arthur White, M.D., Indianapolis

"Antibiotic Prophylaxis in Clean Surgery"—William Altemeier, M.D., Cincinnati

"Tetanus in Kentucky, 1970-1975"—Robert Noble, M.D., Lexington

"Influenza Virus: Clinical Presentation and Epidemiology with Specifics on Swine Flu Virus"—Martin Raff, M.D., Louisville

Panel Discussion on *"Antibiotics"*

THURSDAY, SEPTEMBER 30—Morning Session

"Changing Patterns in Head and Neck Surgery"—John Turner, M.D., Atlanta

"EMI Scanner"—Daryl Dochterman, M.D., Lexington

"The Impact of Computerized Autotomography on the Practice of Neurosurgery"—Ross Miller, M.D., Rochester, N.Y.

"Necrotizing Vasculitis"—W. Mitchell Sams, M.D., Denver

"Medical Examinations Under OSHA: Professionalism vs. Legalism"—Marcus Key, M.D., Houston

Eight specialty groups will meet this afternoon at 1:30 p.m. No general session is scheduled.

Complete Annual Meeting Program Featured In August Issue

In Memoriam

KAREEM R. MINHAS, M.D.
Louisville
1919-1976

Kareem Rux Minhas, M.D., died on May 22 at the age of 57. A native of Nairobi, Kenya, Doctor Minhas was medical director of the Children's Cardiovascular Laboratory at Children's Hospital in Louisville. He was a Professor of Cardiology at the University of Louisville since 1971 and also directed Kentucky's Children's Heart Clinics.

Doctor Minhas also served as Director of Pediatric Cardiology at Children's Hospital and Director of the Cardiac Care Program for the Commission for Handicapped Children. He belonged to the Jefferson County Medical Society, as well as the American and Kentucky medical associations.

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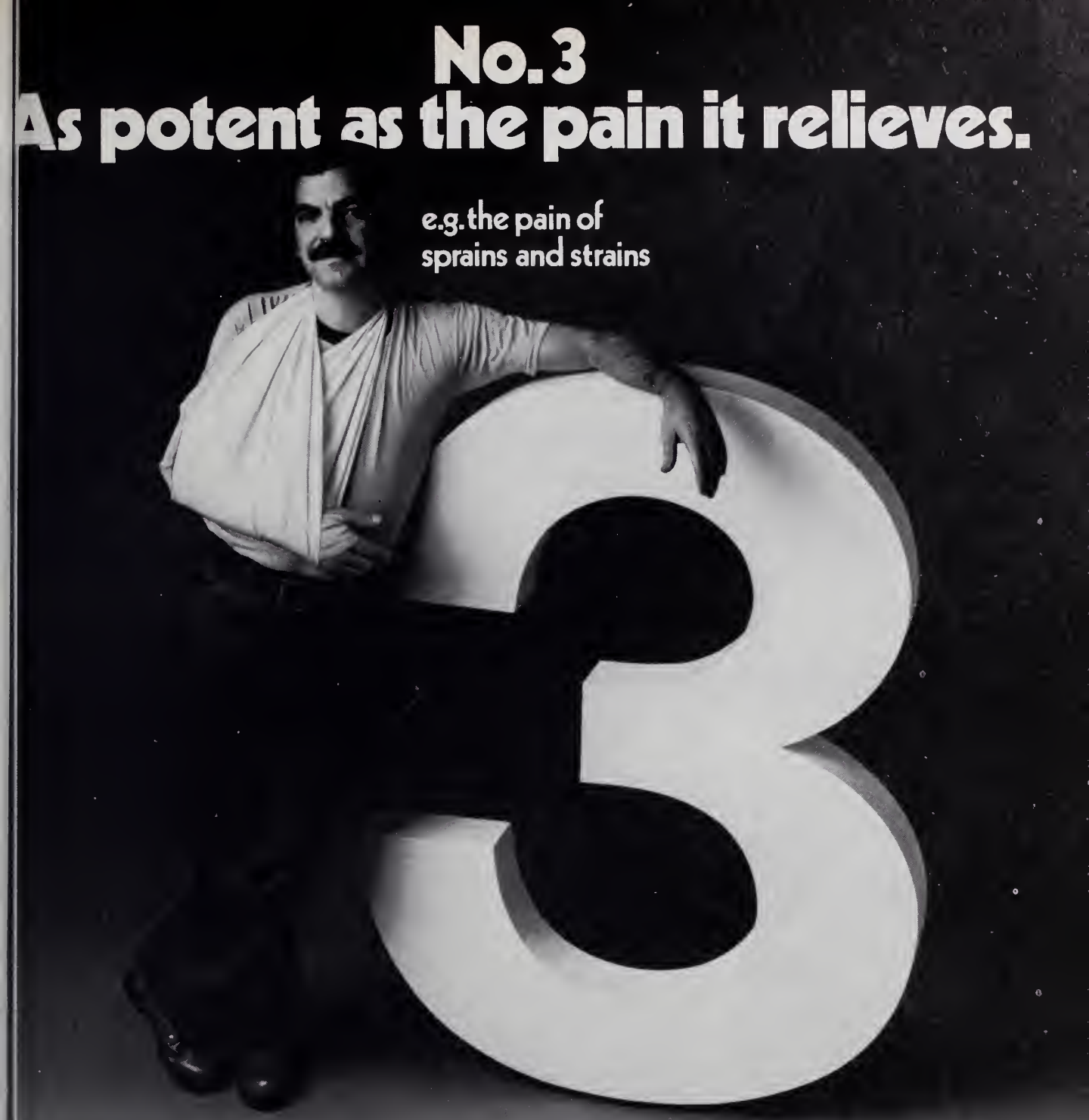
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	Doctors Office Bldg.	Liberty at Floyd	**583-7909**
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	Professional Bldg. East	3101 Breckinridge Lane	**459-0133**
	Medix Bldg.—Adj. S.S. Mary & Elizabeth Hosp.		**367-2277**
	Broadway Bldg.	224 E. Broadway	**583-7137**
ST. MATTHEWS	313 Wallace Avenue		**895-9155**
	108 McArthur Drive		**895-3855**
	901 Dupont Road at Breckinridge Lane		**897-3264**
NEW ALBANY	Professional Arts Bldg.	1919 State Street	**945-2802**
BOWLING GREEN	524 East Main Street		**843-6556**
OWENSBORO	Doctors Bldg.	1001 Center Street	**684-1508**
	Lincoln Professional Ctr.	2816 Veach Road	**685-4725**

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Louisville	638 River City Mall • 901 Dupont Rd.
New Albany	Professional Arts Bldg. • 1919 State St.
Bowling Green	524 East Main Street
Owensboro	Lincoln Professional Ctr. • 2816 Veach Rd.

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Bowling Green	524 East Main Street
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Medicare Office

Ben Sciantarelli
Manager

Metropolitan Life

1218 Harrodsburg Road
Lexington, Kentucky 40504

Dear Doctor

The information contained in this letter and attachment provides a significant and important announcement by the Metropolitan Life Insurance Company, your Part B Medicare Carrier for the State of Kentucky.

Major difficulties in the processing of Medicare claims include the interpretation of services rendered and the coding of these services in order to arrive at a reasonable charge determination. It has been previously required that claims include the description of the service rendered and using this information Medicare clerks translate this description into a four digit procedure code using the 1965 New York Relative Value Schedule as a basic coding system. However, it is realized that you are in a better position to relate your service to our code. In August 1975, we distributed the handbook entitled "Guidelines for Medical Assistants" which contains a full set of our procedure codes. For your convenience we have enclosed a list of approximately 135 frequently used procedure codes. It is requested that you familiarize yourselves with these codes and relate them to your scope of services. In future billings, it will only be necessary to include the code without using the narrative description. Obviously, there will be instances where you will need to submit a narrative description to explain unusual circumstances or when billing for a procedure not included in our procedure coding system. Please be sure to show the diagnosis on the claim form.

The attached examples illustrate the use of codes rather than descriptions on the SSA 1490 claim form and the use of codes on bills to Medicare patients. By listing these codes on bills sent to your patients and on 1490 claim forms completed by you, the following benefits can be expected:

1. Speedier billing by your office.
2. Improved processing quality and faster payments from Medicare.
3. Reduced necessity for telephone calls and letters to your office requesting information.

Metropolitan Life would prefer to use a coding system with more modern nomenclature for Medicare. The Department of Health, Education and Welfare is in the process of developing a new standard coding system for use in all government programs. It would be difficult for Metropolitan to obtain any major changes in the Medicare coding system before this process is completed. Metropolitan Life Insurance Company will continue to add procedure codes for new procedures not covered by the present coding system.

If your office has a fee schedule, it is suggested that the appropriate codes be posted to your schedule and that these codes be used not only for all Medicare claims filed on 1490s by your office, but also used on all receipts and billings to Medicare patients.

We look forward to serving you better as a result of your cooperation in using our procedure codes.

Sincerely

Ben Sciantarelli
Manager

—A Paid Advertisement—

REQUEST FOR MEDICARE PAYMENT

Form Approved OMB No. 72-R0730

MEDICAL INSURANCE BENEFITS—SOCIAL SECURITY ACT (See Instructions on Back—Type or Print Information)

NOTICE—Anyone who misrepresents or falsifies essential information requested by this form may upon conviction be subject to fine and imprisonment under Federal Law

PART I—PATIENT TO FILL IN ITEMS 1 THROUGH 6 ONLY

When completed, send this form to:
Metropolitan Life Insurance Co.
1218 Harrodsburg Road
Lexington, Ky 40504

Copy from YOUR OWN HEALTH INSURANCE CARD (See example on back)

1 Name of patient (First name, Middle initial, Last name)
SALLY SMITH

2 Health insurance claim number (Include all letters)
4 0 0 1 0 1 0 1 0 0 0 1 D

☐ Male ☒ Female

3 Patient's mailing address
West Pleasant Street

City, State, ZIP code
Anytown, KY 4000

Telephone Number
200-0000

4 Describe the illness or injury for which you received treatment (Always fill in this item if your doctor does not complete Part II below)

Was your illness or injury connected with your employment?
☐ Yes ☒ No

5 If you have other health insurance or if your State medical assistance agency will pay part of your medical expenses and you want information about this claim released to the insurance company or State agency upon its request, give the following information.

Insuring organization or State agency name and address

Policy or Medical Assistance Number

6 I authorize any holder of medical or other information about me to release to the Social Security Administration or its intermediaries or carriers any information needed for this or a related Medicare claim. I permit a copy of this authorization to be used in place of the original, and request payment of medical insurance benefits either to myself or to the party who accepts assignment below

SIGN HERE — Signature of patient (See instructions on reverse where patient is unable to sign)
Sally Smith

Date signed
March 22, 1976

PART II—PHYSICIAN OR SUPPLIER TO FILL IN 7 THROUGH 14

7 A. Date of each service	B. Place of service (*See Codes below)	C. Fully describe surgical or medical procedures and other services or supplies furnished for each date given	D. Nature of illness or injury requiring services or supplies	E. Charges (If re listed to unusual circumstances explain in 7C)	Leave Blank
3-22-76	0	9004	Osteoporosis with complete destruction of both hip joints and Otto pelvis bilaterally.	$ 8.00	
3-22-76	0	7304		15.00	
3-22-76	0	7210		15.00	
3-22-76	0	Injection, ACTH, 2cc, 25 units	Dermatitis	7.00	

8 Name and address of physician or supplier (Number and street, city, State, ZIP code)
JONES AND DOE, P.S.C.
WEST MAIN STREET
SOMEWHERE, KENTUCKY 40000

Telephone No. 300-0000

Physician or supplier code 100000

9 Total charges $ 45.00
10 Amount paid $ ---
11 Any unpaid balance due $ 45.00

12 Assignment of patient's bill
☒ I accept assignment (See reverse) ☐ I do not accept assignment.

13 Show name and address of facility where services were performed (If other than home or office visits)

14 Signature of physician or supplier (A physician's signature certifies that physician's services were personally rendered by him or under his personal direction)
Tom Jones M.D.

Date signed
3-28-76

*O—Doctor's Office IL—Independent Laboratory HI—Patient's Home (If portable X-ray services, identify the supplier) IH—Inpatient Hospital ECF—Extended Care Facility OH—Outpatient Hospital OL—Other Locations NH—Nursing Home

FORM SSA-1490 (5-72)

Department of Health, Education, and Welfare
Social Security Administration

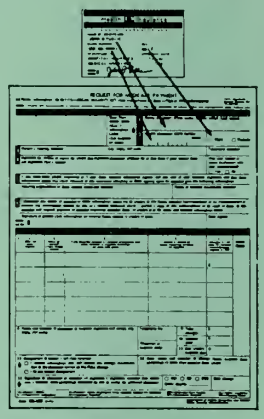
HOW TO FILL OUT YOUR MEDICARE FORM

There are two ways that Medicare can help pay your doctor bills

One way is for Medicare to pay your doctor.—If you and your doctor agree, Medicare will pay him directly. This is the assignment method. You do not submit any claim, the doctor does. All you do is fill out Part I of this form and leave it with your doctor. Under this method the doctor agrees to accept the charge determination of the Medicare carrier as the full charge, you are responsible for the deductible and coinsurance. Please read Your Medicare Handbook to help you understand about the deductible and coinsurance. (Because Medicare has special payment arrangements with group practice prepayment plans these plans handle all claims for covered services they furnish to their members.)

The other way is for Medicare to pay you.—Medicare can also pay you directly—before or after you have paid your doctor. If you submit the claim yourself, fill out Part I and ask your doctor to fill out Part II. If you have an itemized bill from him, you may submit it rather than have him complete Part II. (This form, with Part I completed by you, may be used to send in several itemized bills from different doctors and suppliers.) Bills should show who furnished the services, the patient's name and number, dates of services, where the services were furnished, a description of the services, and charges for each separate service. It is helpful if the diagnosis is also shown. Then mail itemized bills and this form to the address shown in the upper left-hand corner. If no address is shown there, use the address listed in Your Medicare Handbook—or get advice from any social security office.

SOME THINGS TO NOTE IN FILLING OUT PART I
(Your doctor will fill out Part II.)



1 & 2 Copy the name and number and indicate your sex exactly as shown on your health insurance card. Include the letters at the end of the number.

3 Enter your mailing address and telephone number, if any.

4 Describe your illness or injury. Be sure to check one of the two boxes.

5 If you have other health insurance or expect a welfare agency to pay part of the expenses, complete item 5.

6 Be sure to sign your name. If you cannot write your name, sign by mark (X), and have a witness sign his name and enter his address on this line.

If the claim is filed for the patient by another person he should enter the patient's name and write "By," sign his own name and address in this space, show his relationship to the patient, and why the patient cannot sign. (If the patient has died, the survivor should contact any social security office for information on what to do.)

IMPORTANT NOTES FOR PHYSICIANS AND SUPPLIERS

Item 12: If assigned cases the patient is responsible only for the deductible, coinsurance, and non-covered services. Coinsurance and the deductible are based upon the charge determination of the carrier if this is less than the charge submitted. This form may also be used by a supplier, or by the patient to claim reimbursement for charges by a supplier for services such as the use of an ambulance or medical appliances.

If the physician or supplier does not want Part II information released to the organization named in item 5, he should write "No further release" in item 7C following the description of services.

☆ U.S. GPO: 1972—O—466-661/6

EXAMPLE

PREFERRED BILLING STATEMENT

Multiple Services Statement

When more than one service is performed, indicate each separately with a separate charge (itemization). Hand written statements should be legible with an adequate space between services. Most telephone calls to your office are to clarify claims that are illegible and not itemized. The same itemization on a billing statement as on a claim form is needed since the same determination needs to be made.

IMPORTANT NOTE: Please identify name and laboratory if the analysis is conducted outside the physician's office.

A. B. WHITE, M.D.
200 MAIN STREET
SOMEWHERE, KY 40503

MARY B. SMITH
200 OAKLAND DRIVE
SOMEWHERE, KY 40503
HICN 410-11-1010A

(Actual Date of Service Not the Date of billing)		
4/1/76	9004,	$XXXX BAL. DUE
	8628,	XXXX
	8936,	XXXX
	7100,	XXXX
	DX: BRONCHITIS	XXXX

LIST OF OFTEN USED PROCEDURE CODES

OFFICE VISITS

9000—Initial office visit, routine, new patient or new illness, history and examination.

9001—Initial (or subsequent) office visit, complete diagnostic history and physical examination, established patient or minor chronic illness, including initiation of diagnostic and treatment programs.

9002—Initial (or subsequent) office visit, complete diagnostic history and physical examination, new patient or major illness, including initiation of diagnostic and treatment programs.

9003—Follow-up office visit, brief.

9004—Follow-up office visit, routine.

9005—Follow-up office visit necessitating professional care over and above routine visit.

9006—Follow-up office visit, prolonged, over and above 9005.

9007—Follow-up office visit necessitating complete re-examination and re-evaluation of patient as a whole (continuing illness).

9008—Re-examination, comprehensive diagnostic history and re-evaluation, established patient.

HOME VISITS

9010—Initial home visit, routine, new patient or new illness, history and physical examination.

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9011—Initial home visit, complete diagnostic history and physical examination, established patient or minor chronic illness, including initiation of diagnostic treatment programs.
9012—Initial home visit, complete diagnostic history and physical examination, new patient or major illness, including initiation of diagnostic and treatment programs.
9013—Follow-up home visit, brief.
9014—Follow-up home visit, routine.
9015—Follow-up home visit necessitating professional care over and above routine visit.
9017—Follow-up home visit necessitating complete re-examination and re-evaluation of patient as a whole (continuing illness).
9018—Home visit each additional member of same household.

NURSING HOME OR SNF VISITS

9098—Initial nursing home visit, routine, new patient, or new illness, history and examination.
9009—Follow-up nursing home visit, routine, only patient seen.
9019—Nursing home visit each additional patient of same Nursing Home, Gang visits.
9099—Initial skilled nursing home visit.
9023—Follow-up skilled nursing home visit.
9032—Follow-up skilled nursing home visit necessitating care over and above routine visit.

HOSPITAL VISITS

9020—Initial hospital visit, routine history and physical examinaton, including initiation of diagnostic and treatment programs and preparation of hospital records.
9021—Initial hospital visit, complete diagnostic history and physical examination, established patient or minor chronic illness, including initiation of diagnostic and treatment programs and preparation of hospital records.
9022—Initial hospital visit, complete diagnostic history and physical examination, new patient or major illness, including initiation of diagnostic and treatment programs and preparation of hospital records.
9024—Follow-up hospital visit, routine.
9025—Follow-up hospital visit necessitating care over and above routine visit.
9027—Prolonged visit in ICU or CCU.
9026—Emergency room or out-patient hospital visit.
9033—Emergency out-patient hospital visit.

CONSULTATIONS

A consultation is considered to include those services rendered by a physician whose opinion or advice is requested by another physician or an agency in the evaluation and/or treatment of a patient's illness.

9028—Consultation requiring limited examination and/or evaluation of a given system but not requiring a complete diagnostic history and examination, home, office or hospital.
9029—Consultation requiring more extensive examination and/or evaluation but not requiring complete diagnostic history and examination, home, office or hospital.
9030—Consultation requiring complete diagnostic history and examination and/or evaluation, office, home or hospital.

OTHER SERVICES

9070—Mileage, per mile, one way, beyond 10 miles radius of point of origin (office or home).
9071—Detention: prolonged detention with patient in critical condition requiring constant attention beyond usual service, per hour.
9073—Night calls: calls made between 8:00 p.m. and 8:00 a.m. in response to requests received during those hours.
Use this code in addition to code for hospital or home visit.

DIAGNOSTIC—THERAPEUTIC SERVICES

9441—Office visit with two or more modalities to same area.
9442—Any one of the modalities in 9440, when billed separately from an office call.
9444—Office visit with one of the following procedures to one area, initial 30 minutes.

a. Therapeutic exercises
b. Neuromusclar re-education
c. Functional activities
d. Gait training
e. Orthotics training
f. Prosthetics training
g. Electrical stimulation (manual)
h. Iontophoresis
i. Traction, manual
j. Massage
k. Contrast baths

PHYSICAL MEDICINE

Modalities:

9440—Office visit with one of the following modalities to one area

a. Hot or cold packs
b. Traction, mechanical
c. Electrical stimulation (Unattended)
d. Ultrasound
e. Vasopneumatic devices
f. Paraffin bath
g. Microwave
h. Whirlpool
i. Diathermy
j. Infra-red
k. Ultraviolet

RADIOLOGY

7025—Skull, less than four views with or without stereo, basilar view x-rays.

CHEST

7099—Chest, "Minifilm"
7100—Single view (i.e., PA or lateral chest)
7101—Two views (i.e., PA and lateral or PA and decubitus)
7102—Complete, minimum of four views including fluoroscopy where indicated, heart x-rays, oblique
7103—Fluoroscopy (independent procedure)

UPPER EXTREMITIES

7245—Clavicle (collar bone)
7246—Scapula (shoulder blade)
7247—Shoulder, one projection
7248—Complete study
7250—Humerus, including one joint one view
7257—Wrist, A-P and Lat.

SPINE AND PELVIS

7210—Lumbo-sacral, A-P and Lat.
7211—Complete lumbo-sacral, minimum five views

LOWER EXTREMITIES

7299—Hip, one view
7300—Complete study
7303—Femur
7304—Knee, two views (usually AP and lateral)
7305—Complete study, minimum three views
7306—Tibia and fibula, 2 views
7307—Ankle, 2 views
7308—Complete study, minimum three views
7309—Foot, two views (usually dorsiplantar and lateral)
7310—Complete routine study, minimum three views

ABDOMEN

7350—Abdomen, single AP
7351—Complete study, minimum of three views

GASTRO-INTESTINAL TRACT

7355—Esophagus or barium swallow
7356—Upper gastro-intestinal tract, with or without delayed films (also UGI or stomach x-rays)
7360—Colon, barium enema (lower GI or BE) with or without KUB
7363—Cholecystography, oral dye (routine gallbladder) Salbulogram

UROLOGICAL

7370—Kidney, ureter and bladder, (KUB) single view
7372—I.V.P. (Urography, intravenous, including KUB)

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LABORATORY

MICROBIOLOGY

8457—Culture all other sources, screening bacteria only, uroscreen
8459—Culture and sensitivity test up to 10 antibiotics (disc)

IMMUNOLOGY

8675—Flocculation test (Kline, Kahn, VDRL, etc.) serology, FTA, FTS, RPR

HEMATOLOGY

8620—RBC (blood, red cell count)
8622—Hemoglobin determination, photoelectric HBG Hb
8624—White cell count WBC Leukocytes
8626—Differential (Shillings by lab.) diff
8628—Complete blood count CBC includes RBC, WBC, Hgb. Diff.
8681—Hematocrit (packed cell volume or PCV) Hct
8708—Platelet Count
8712—Prothrombin time, each (PT, PTT, Pro time)
8718—Sedimentation Rate, ESR, SR, SEDR, Westergren

BLOOD CHEMISTRY AND TOXICOLOGY

8652—Cholesterol
8696—Lipids, total
8710—Protein-bound iodine (PBI)
8721—Sodium (Na)
8722—Sugar (Glucose) blood sugar, FBS, ames reflection meter
8745—Urea nitrogen (BUN)
8747—Uric Acid, BUR, BUA
8709—Potassium K or Serum K

TISSUES

8911—Cytologic study (Papanicolaou type) screening only, Pap smear (or any microscopic tissue examination).
8923—Surgical, gross and microscopic

URINE

8936—Complete routine (chemical and microscopic)

FECES

8801—Blood, occult, hemocult, guiac

DIAGNOSTIC SERVICES

9101—Electrocardiogram with interpretation and report
9103—Electrocardiogram interpretation and report only

RADIOTHERAPY: SUPERFICIAL, GRENZ OR LOW VOLTAGE

7600—Dermatoses (3 fields or less), per treatment
7603—Malignant lesions, per treatment

SUPERVOLTAGES OR MEGAVOLTAGE,

1 million volts and higher

(betatron, linear accelerator, cobalt, etc.)
7609—Per treatment

SURGERY

INTEGUMENTARY SYSTEM

Skin, Mucous Membrane, Subcutaneous and Areolar Tissues
Incision (-Otomy)
0108—Incision and drainage of carbuncle, suppurative hidradenitis and other cutaneous or subcutaneous abscesses, simple I & D
0109—Extensive
Excision (-Ectomy)
Debridement (for abrasions and burns, see 0164, 0330-0334, 0351-0356)
0160—Debridement of extensively eczematized (scales or scabs—dermatized) or infected skin up to 10% of the body surface.
0161—For each additional 10% of body surface, add
0162—Debridement of nails, any method, five or less.
0163—For each additional five or major portion thereof.
0164—Debridement of abrasions or scrapes.
Excision by knife (including simple closure) of benign cicatricial, fibrous, inflammatory, congenital, cystic, etc., lesions of skin, subcutaneous tissue or mucous membrane; one (see appropriate size below.)
0175—lesion diameter up to ¼ inch
0176—lesion diameter ¼ to ½ inch
0177—lesion diameter ½ to ¾ inch
0178—lesion diameter more than ¾ inch or complicated
Destruction
0401—Electro-surgical destruction with or without surgical curettement of facial nevi, leukoplakia, actinic or senile keratoses, or keratoacanthomas, to include local anesthesia, one lesion
0402—Complicated lesion(s)

MUSCULOSKELETAL SYSTEM

Joints

Incision (-Otomy)
Arthrotomy or capsulotomy with exploration, drainage, or removal of loose body, e.g., osteochondritis or foreign body.
Arthrocentesis
1046—Puncture for aspiration of joint effusion (not traumatic), or injection of medication, initial or subsequent.

DIGESTIVE SYSTEM

Endoscopy (independent procedure)
3306—Colonoscopy
3310—Proctosigmoidoscopy diagnostic, initial
3311—Subsequent
Repair (Plasty or Orrhaphy)
Hernioplasty, Herniorrhaphy, Herniotomy:
3631—Inguinal, unilateral

URINARY SYSTEM

Introduction
3926—Bladder irrigation, simple lavage and/or instillation or catheterization.
3927—Injection procedure for cystography or urethrocystography
3928—Cystometric examination.
Cystoscopy or Cystourethroscopy
(Independent procedure):
3930—Diagnostic, office, initial
3931—Subsequent within 30 days
3932—With ureteral catheterization
3933—Hospital
3934—With ureteral catheterization
Manipulation
4031—Dilation of urethral stricture by passage of sound, initial; Urethral calibration, male.
4036—Dilation of female urethra including suppository and/or installation.

MALE GENITAL SYSTEM

Endoscopy
4321—Transurethral resection of prostate, including control of post-operative bleeding (bladder neck control) and cystoscopy or cystourethroscopy, complete.

EYE

Diagnostic and Manipulative Procedures
5409—Tonography (recording tonometer method or perilimbal suction device)
5400—Eye examination *without* refraction but may include opthalmoscopy, tonometry, gross visual fields and muscle balance examination.
Excision (Ectomy)
5611—Extraction of lens, intracapsular, extracapsular or linear, unilateral.

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THE ANXIETY-SPECIFIC.

- a predictable pattern of patient response
- seldom associated with serious side effects, in proper dosage
- rarely interferes with mental acuity
- used concomitantly with many primary medications
- three dosage strengths meet most patient needs

LIBRIUM® Ⓒ IV

chlordiazepoxide HCl/Roche

5 mg, 10 mg, 25 mg capsules

Libritabs® (chlordiazepoxide) available in 5 mg, 10 mg and 25 mg tablets.

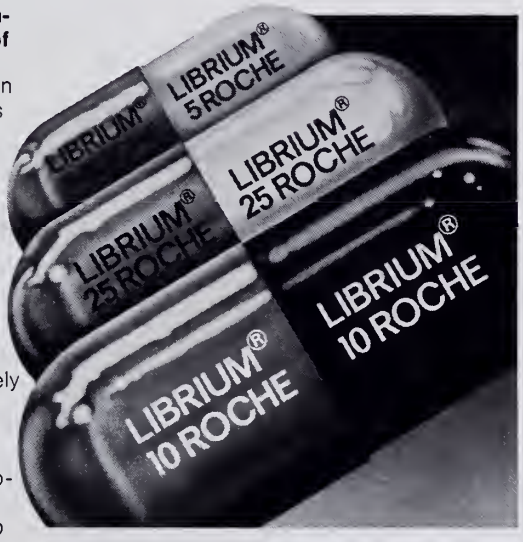
efore prescribing, please consult complete product information, a summary of hich follows:

ndications: Relief of anxiety and tension ccurring alone or accompanying various isease states.

ontraindications: Patients with known ypersensitivity to the drug.

Varnings: Caution patients about possible combined effects with alcohol and ther CNS depressants. As with all CNS-cting drugs, caution patients against azardous occupations requiring complete mental alertness (*e.g.*, operating achinery, driving). Though physical nd psychological dependence have rarely been reported on recommended doses, se caution in administering to addiction-prone individuals or those who night increase dosage; withdrawal symptoms (including convulsions), following liscontinuation of the drug and similar to hose seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age equires that its potential benefits be veighed against its possible hazards.

Precautions: In the elderly and debilitated, nd in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, ncreasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider ndividual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.



Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido —all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Usual Daily Dosage: Individualize for maximum beneficial effects. *Oral—Adults:* Mild and moderate anxiety and tension, 5 or 10 mg *t.i.d.* or *q.i.d.*; severe states, 20 or 25 mg *t.i.d.* or *q.i.d. Geriatric patients:* 5 mg *b.i.d.* to *q.i.d.* (See Precautions.)

Supplied: Librium® (chlordiazepoxide HCl) *Capsules*, 5 mg, 10 mg and 25 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10. Libritabs® (chlordiazepoxide) *Tablets*, 5 mg, 10 mg and 25 mg—bottles of 100 and 500. With respect to clinical activity, capsules and tablets are indistinguishable.

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Nutley, New Jersey 07110

Please see following page.

THE ANXIETY-SPECIFIC.

Since its discovery in the research laboratories at Roche, Librium has been the object of ongoing pharmacologic and clinical investigation.

The published record on Librium is enormous. So large, in fact, we put it into a computer literature retrieval system to make it more accessible in answering your inquiries.*

It's a record that reveals a consistent pattern of patient response. A highly favorable benefits-to-risk ratio. And minimal interference with many primary medications.

Doing one thing well. Basically, that's what Librium is all about.

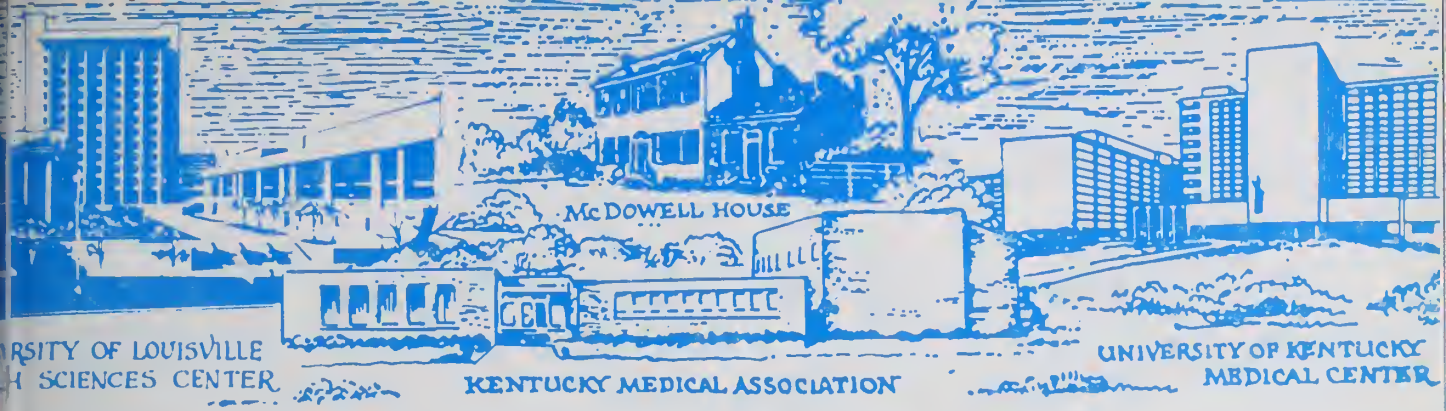
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Please see preceding page for a summary of product information.



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The Journal of The KENTUCKY Medical Association

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1976 KMA ANNUAL MEETING
September 27-30
Ramada Inn/Bluegrass Convention Center
Louisville

LUME 74 AUGUST 1976 NUMBER 8

Both often



Predominant psychoneurotic anxiety

Associated depressive symptoms

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.



Valium®
(diazepam) Ⓘⓥ

2-mg, 5-mg, 10-mg scored tablets

in psychoneurotic
anxiety states
with associated
depressive symptoms

surveillance because of their predisposition to habituation and dependence. In pregnancy, lactation or women of childbearing age, weigh potential benefit against possible hazard.

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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NEOSPORIN® Ointment
(polymyxin B-bacitracin-neomycin)
is a famous fighter, too.

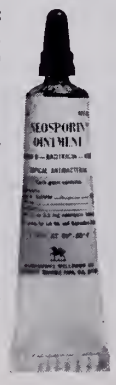
Provides overlapping, broad-spectrum antibacterial action to help combat infection caused by common susceptible pathogens (including staph and strep).

Each gram contains: Aerosporin® brand Polymyxin B Sulfate 5,000 units; zinc bacitracin 400 units; neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin base); special white petrolatum qs in tubes of 1 oz and 1/2 oz and 1/32 oz (approx.) foil packets.

INDICATIONS: Therapeutically (as an adjunct to systemic therapy when indicated) for topical infections, primary or secondary, due to susceptible organisms, as in: • infected burns, skin grafts, surgical incisions, otitis externa • primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia) • secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis) • traumatic lesions, inflamed or suppurating as a result of bacterial infection.

Prophylactically, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing. **CONTRAINDICATIONS:** Not for use in the eyes or external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of the components. **WARNING:** Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended. **PRECAUTIONS:** As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs. **ADVERSE REACTIONS:** Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.



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MESSAGE FROM THE PRESIDENT



Living and Well

There are times during the private practice of medicine that the problems appear to outnumber the solutions. Indeed, this seems to be the rule rather than the exception. If this is true in private practice, it is doubly true in the politics of medical practice at the state and national levels.

We, as physicians who concern ourselves daily with the problems of our private patients, often feel frustration, anger, and disillusionment over the almost daily conflicts medicine meets in the political arena.

Although this daily struggle is a reality and should be our constant concern, it may well be that this is just the nature of medicine. We practice a dynamic art; it has always been thus and I hope always will be. Yesterday's treatments are traditionally altered to keep the practice of medicine abreast with man's progress in other fields. Medicine and struggle (to control man's diseases), two constant companions since and even before the day of Hippocrates, remain so today with the patient squarely in between.

A new adversary has joined the three in the past 25 years—the politician. Our national and state governing bodies have become increasingly involved in health care fields. Whether this is genuine concern for the patient or political expedience perhaps only our future historians will decide. The fact remains nevertheless that medicine is suddenly Big Business and Everyone's Business.

This fact has placed a new urgency among those who practice our art to become politically oriented and organized. The day is long passed when an individual physician faces an individual patient and thinks he is the only factor to the treatment of that patient.

In the past Legislative year, we have witnessed what can occur if we as politically oriented and organized practitioners use our collective concern to change the practice of medicine. The change may be small compared to the needs, but I think many physicians in the past few months have stood a little taller following the efforts of Doctor David Hull and other members of our Association in dealing with malpractice problems. The physician is becoming a political person. He has had to survive and maintain a desirable position from which to practice his art.

The most important fact to become obvious in the past year is that through effective leadership by our Association officers supported strongly by the entire membership and coordinated by an excellent Association staff, we become an effective voice for all that is good in medicine. Therefore, I feel at the present time Kentucky medicine, though not completely happy, is living and well.

JOHN M. BAIRD, M.D.
KMA VICE-PRESIDENT

This is the fourth in a series of articles written at the request of KMA President, David A. Hull, M.D.

A Link in the Chain

auxiliary

The Auxiliary to the Kentucky Medical Association will hold its 54th Annual Convention in conjunction with the annual meeting of the KMA, September 27-29.

Our theme for this year is SOMETHING FOR EVERYONE with plans to include every physician's wife. Time is allotted for conducting business and workshops will be conducted on Project Bank, legislation, AMA-ERF, and Membership. The HOSPITALITY SUITE—Room 1132, Poolside, will be open for all to enjoy with refreshments, auxiliary slides, and an opportunity to talk with others. A special luncheon at Big Spring Country Club will honor past presidents, install newly elected officers, and show us fashions for all. Everyone who registers will be given a gift and a copy of the history of our auxiliary. There is SOMETHING FOR EVERYONE AT CONVENTION '76. Even if your wife is not an Auxiliary member or is presently inactive, she is cordially invited to any or all events.

Mrs. Wally O. Montgomery, President
Auxiliary to KMA

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Registration in Lobby

MONDAY, September 27

2:00 p.m. - 3:00 p.m. . . . . Pre-Convention Board Meeting
3:00 p.m. - 4:00 p.m. . . . . Workshops—Project Bank & Legislation
6:00 p.m. . . . . KEMPAC Reception & Dinner with Guest Speaker, Richard M. Scammon

TUESDAY, September 28

7:30 a.m. - 8:45 a.m. . . . . Continental Breakfast (husbands invited)
9:00 a.m. -11:00 a.m. . . . . AKMA House of Delegates Session
12:00 noon - 2:30 p.m. . . . . Luncheon—Big Spring Country Club with Style Show
3:00 p.m. - 4:00 p.m. . . . . Tour of KMA Building
5:30 p.m. - 7:00 p.m. . . . . Reception Honoring KMA and AKMA Presidents-Elect

WEDNESDAY, September 29

9:00 a.m. -11:30 a.m. . . . . Post Convention Board Meeting
11:50 a.m. . . . . KMA President's Luncheon with Speaker J. Ed McConnell, KY My KY
2:30 p.m. - 4:00 p.m. . . . . Workshops on AMA-ERF, Membership, and all County Presidents

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Report From KMA Cancer Committee——

New and Unproven Methods of Cancer Treatment — "Laetrile"*

American history abounds with stories of quacks, traveling medicine men, "Indian" healers, and other charlatans. One has only to recall the fortunes built on well-nigh worthless patent medicines and the names of Groves (Chill Tonic), Lydia Pinkham, Argyrol, and Hadacol, to name only a few, to recall an era of legend and humor from America's past which has been celebrated in the stories of Mark Twain and others.

One can view with objectivity and mild amusement the spectacle of hard-earned wages being spent on innocuous but worthless remedies for the minor ills, headaches, and malaises of mankind, but it is impossible to view with equanimity the tens of thousands of patients with cancer who drop out from valid oncologic treatment programs each year to seek the dubious aid of new and unproven, and all too often worthless or harmful, "remedies".

A case in point is the evaluation of a prominent but unproven method of cancer treatment using a drug called "Laetrile". Recently, a chapter of an organization called the Committee for the Freedom of Choice in Cancer Treatment was "founded" at a meeting held not too long ago in Louisville. The event received considerable publicity in the newspapers. The glowing but scientifically vague claims of the proponents of the method were given considerable publicity in the newspaper review. Federal prohibition of the importation and sale of the drug was attacked by its proponents in the newspaper article as an unfair restriction of the freedom of American citizens. No mention was made of the adverse findings of the Federal Drug Administration, the American Cancer Society, and the National Cancer Institute in their research evaluation of the drug.

Laetrile was first discovered in 1920 by Ernest T. Krebs, a physician then residing in California. It was said to be a substance called amygdalin manufactured from ground peach pits and described by Krebs as a laevo-mandelo-nitrile-beta-glucuroniside. Krebs proposed it as a treatment for cancer but stated that he had found it too toxic for use in humans, although he claimed some success with it in laboratory animals. The hypothesis of its action on cancer was that amygdalin in contact with glucuronidase in human cancer tissue released hydrogen cyanide, a cellular poison. This, in contact with cancer cells, killed them, leaving normal tissues unharmed. Subsequent modifications and dilutions of the parent substance followed and the resulting preparation was hailed as a non-toxic cancer cure or treatment. After overcoming the evasions and trickery on the part of the manufacturers of the drug, a supply of the substance was finally obtained and turned over to biochemists, oncologists, and other scientists at the University of California School of Medicine, and to physicians at the Los Angeles County Hospital, in 1953. Carefully supervised and scientifically structured research testing followed, under the supervision of the Commission on Cancer of the California Medical Association. The drug was found to be quite toxic to laboratory animals, killing many, in the dosages advocated by its proponents, and failed completely to control in any way the growth of animal tumors which ordinarily were easily obliterated or controlled by available biochemical methods. With great difficulty, a list of 44 human patients with cancer treated by Laetrile was accumulated. Most of these patients died rather promptly while under treatment. Some survived, living with cancer which was not influenced in any way by Laetrile. Others treated by Laetrile but also treated simultaneously by well-recognized methods of control such as radiotherapy and chemotherapy, survived, living with their cancers, unaltered by the addition of Laetrile. Only one patient out of the 44 surveyed was reported to be free from cancer and living, but it was then found that her cancer had been an in situ precancerous condition of the cervix which, when subjected to subsequent hysterectomy, was absent from the surgical specimen, a circumstance which happens often in the routine treatment of cervical cancer in situ. No histologic evidence of the original in situ cancer was ever available in the form of microscopic sections.

The final chapter in this inglorious record of Laetrile now appears to be that it is not any longer claimed as a treatment or cure for cancer, but merely a preventive. If you take the drug, you will not develop cancer. Its proponets fail to state, however, how one determines, beforehand, that one is about to develop cancer and is, therefore, in need of the drug.

What can the physician do? He can support state legislative action for the local control of unproved methods of cancer management. Such action has resulted in cancer quackery laws in California, Kentucky, Nevada, and other states. He can assist the cancer committee or commission of his state or county medical society in investigating unestablished claims. In addition, he can report information on new or unproved methods to his medical society and the American Cancer Society. Also, he can seek information on new or unproved methods of cancer management, when needed, from the American Cancer Society or American Medical Association. And finally, he should recognize his cancer patient's need for continued total care, since most victims of unproved methods are patients with advanced cancer.

This article was written by George B. Sanders, M.D., Louisville.

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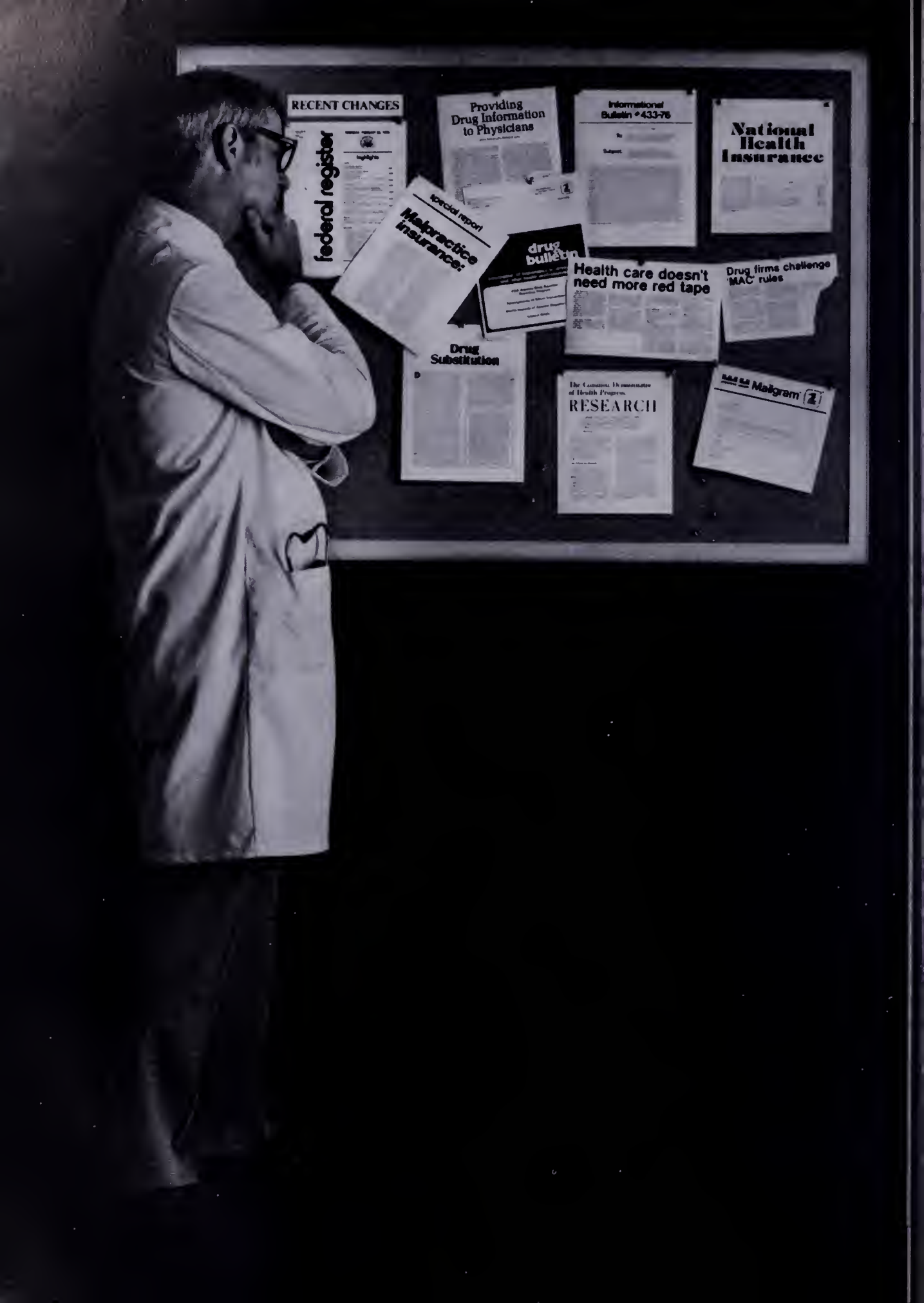
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THERE ARE A LOT OF PEOPLE GETTING BETWEEN YOU AND YOUR PATIENT.

Medicine today is in the spotlight, subjected to all kinds of scrutiny. Your control over patient therapy is being monitored, judged and occasionally abrogated, sometimes by unknown third parties.

The worry is that in the wake of this focus, the relationship between you and your patient will be weakened, without offsetting benefits. Consider three examples:

Drug substitution In most states, pharmacy laws, regulations or professional custom stipulate that your non-generic prescriptions be filled with the precise products you prescribe. But in the last five years, a dozen or more State laws have been changed, permitting the pharmacist in most cases to select a product of the same generic drug to fill any prescription.

Ironically, this dilution of physician control has taken place against a background of growing evidence that purportedly equivalent drug products may be inequivalent, since neither present drug standards nor their enforcement are optimal. In fact, the FDA itself says it has not enforced the same standards for hundreds of "follow-on" products that it had applied to the original NDA approvals. Thus physician control over patient therapy is being eroded with a risk that patients may be exposed to drugs of uncertain quality.

The major advertised claim for substitution is reduced prescription prices for consumers. Yet no documentation of any significant savings has been produced.

MAC Maximum Allowable Cost, MAC for short, is Federal regulation designed to cut the Government's drug bill by setting price ceilings for drugs dispensed to Medicare and Medicaid patients. Unless the prescriber certifies on the prescription that a particular product is medically necessary, the Government intends to pay only for the cost of the lowest-priced, purportedly-equivalent, generally-available product. The effect of the program may be that elderly and indigent patients will be restricted to products which someone in Washington believes are priced right. Practicing doctors will have little to say about administration of the program, since Government will have absolute authority to make its choices stick.

The drug lag The future of drug and device research depends upon a scientific and regulatory environment that encourages therapeutic innovations. The American pharmaceutical industry annually is spending more than $1 billion of its own funds and evaluating more than 1,200 investigational compounds in clinical research. Disease targets include cancer, atherosclerosis, viruses and central nervous system disorders, among others. But there is a major barrier to the flow of new drugs to your patients: The cost of the research is more than ten times what it was, per product, in 1962; and whereas governmental clearance of new drug applications took six months then, it commonly consumes two years now.

The FDA needs adequate time, of course, to consider data. But it is equally clear that the present approval process contributes to needless delay of needed therapy. That's why the increased efficiency of the drug approval process is vital to all our futures.

If these issues concern you, we suggest that you make your voice heard—among your colleagues and your representatives in State legislatures and in Washington.

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VOLUME 74 AUGUST 1976 NUMBER 8

The Successful Management of Recurring Wintertime Upper Respiratory Illnesses In Children†

ERWIN A. JONES, JR., M.D.
Lexington, Kentucky

Large numbers of children are seen every winter with illnesses characterized by rhinorrhea, cough, sore throat, and low grade fever. Since these illnesses are assumed to be infectious in their etiology, antibiotics along with decongestants are prescribed. However, many children do not respond to this mode of therapy. This paper will attempt to answer why such treatment fails in these children and will suggest a fresh approach in management.

THE child with chronic and recurrent upper respiratory illnesses is frequently a source of frustration to his parents as they strive to deal with his recurring illnesses. Such cases are very challenging to the physician who is attempting to uncover the etiology of these illnesses and treat them effectively.

In my experience, many children with recurrent upper respiratory illnesses are allergic children. The symptoms which they manifest are allergic in etiology.

In an article on the uses and abuses of hyposensitization in children,[1] Johnstone makes the point that "the most satisfactory therapy for atopic disease is complete avoidance of exposure to offending allergens."

It was this concept which stimulated me to embark on a treatment program of avoidance without hyposensitization in a group of children with recurring wintertime upper respiratory illness felt to be allergic in etiology. In 1971 I reported a pilot study[2] in which a small group of children with recurrent upper respiratory illness, felt to be allergic in etiology, was managed with an avoidance program. This program involved avoidance of dust and mold as well as foods thought to be significant in the causation of symptoms.

The results of this study were encouraging in that 83% of the children so managed showed a good response, were rendered essentially free of symptoms, maintained their improvement, and were not begun on a program of injection treatment. This study has been continued and enlarged to include over 100 children.

Methods

STUDY POPULATION: The children reported in this study were referred by family practitioners and pediatricians for allergy evaluation because of constant or near constant upper respiratory illness during the months October through April.

HISTORY: Every child in this study gave a history of recurrent upper respiratory illnesses beginning in the late fall, continuing through the winter, and terminating in early spring. Symptoms of which these children complained were continual or recurrent rhinitis, cough (frequently

†*From the Department of Allergy and Immunology, Lexington Clinic, Lexington. This study supported in part by a grant from the Lexington Clinic Research Foundation.*
Received at KMA: 4-28-76

Table 1

SUMMARY OF HISTORIES OF 114 CHILDREN IN STUDY

	# of Patients
Age (Yrs)	
<6	71
>6	43
Duration of Symptoms (Yrs)	
0-1	24
1-2	24
2-3	23
>3	43
Interval Symptoms	
Rhinitis	96
Cough	79
Eye Symptoms	10
Wheeze	7

more prominent at night), nasal itching, eye symptoms, sneezing, and wheezing.

LABORATORY: Pertinent laboratory studies were obtained on each child. Not every laboratory test utilized was performed on every child. Those laboratory studies which were done included: CBC, nasal smear for eosinophils, quantitative immunoglobulins, chest x-ray, urinalysis, and tuberculin and histoplasmin skin tests.

SKIN TESTS: All of the children were skin tested by both the scratch and intradermal technique to a variety of common antigens which included house dust, environmental allergens, molds, pollens common to Central Kentucky, and foods. Scratch testing was performed utilizing an antigen concentration of 1:20 (w/v). Intradermal testing was performed with antigen at a concentration of 1:1,000 (w/v). Tests which were interpreted to be significant were those in which the diameter of the wheal or the area of erythema was 5 mm greater than control.

TREATMENT: Every child in this group was treated initially with an avoidance program to decrease house dust and mold exposure and to restrict foods which were felt to be a problem for the child, either from the history or by skin testing.

Results

HISTORY: Tables 1 and 2 summarize the histories of these children. The length of time symptoms had been present varied from 0-12 months in 24 children to over 3 years in 43 children (Table 1).

All children had interval symptoms (Table 1). Ninety-six children had rhinitis, 79 had cough, frequently more severe at night. Ten children had eye symptoms and seven had some wheezing during intervals between episodes of more severe illness.

Forty-seven children had a history of at least one episode of bronchitis or pneumonia (Table 2). Thirty-six children were reported to have had at least one episode of asthma. Forty-three children had recurring otitis media and 66 gave a history of milk intolerance (Table 2).

In my experience, food intolerance should be suspected when there is a history of any of the following, alone or in combination: 1) Feeding problems in infancy (excessive spitting, vomiting, colic). 2) Problems with stool patterns, either diarrhea or constipation. 3) Vague or unexplained headache, stomachache, leg ache. 4) Unexplained fretfulness, restlessness, irritability, tension. 5) Eczematoid dermatitis. In this report, children with these symptoms are listed as food intolerant. In addition, those children whose mothers reported symptoms attributed specifically to foods are included. I find that milk is the most frequent offending food in this group of patients, but other foods are also sometimes incriminated.

Table 2

SUMMARY OF PAST HISTORIES OF 114 CHILDREN IN STUDY

	# of Patients
Bronchitis	21
Pneumonia	26
Asthma	36
Otitis	43
Fever	2
Suspected Food Intolerance	66

LABORATORY: Pertinent laboratory studies are summarized in Table 3. Serum eosinophils were elevated in 25 of 94 children. Blood counts were not done in 20 children. Nasal eosinophils were elevated (greater than 5%) in 45 of 92 children. In 22 children nasal smears were not obtained. Serum immunoglobulins were normal or elevated in nearly all children. Twenty-eight children had normal levels of all immunoglobulin fractions. In six children all immunoglobulin fractions were elevated. In 22 children serum IgA and IgG were normal while IgM was elevated.

SKIN TESTS: Table 4 portrays the results of allergy skin testing. Most children showed positive skin tests to house dust, molds, and foods.

Table 3

SUMMARY OF LABORATORY STUDIES

	# of Patients
Serum Eosinophils	
ND*	20
Elevated	25
Normal	69
Nasal Eosinophils	
ND	22
Elevated	45
None	47
Serum Immunoglobulins	
ND	43
**	
IgA N, IgG N, IgM N	28
IgA↑, IgG↑, IgM↑	6
IgA N, IgG N, IgM↑	22
ALL OTHERS	15

*ND = Not Done
**N = Normal Range

Less than one-half of the group were skin test positive to pollens.

TREATMENT: The results of treatment are shown in Table 5. Ten children were started on a program of dust and mold avoidance. Of these, eight did well. (In this report, a good response is defined as one where there are few, if any, symptoms and medication is rarely or never needed).

One hundred and four children were started on a program of avoidance plus diet restriction. Of these, 78 showed a good response. Thus, of the total group, 86 children became virtually asymptomatic.

Nineteen children had a fair response. (A fair response is defined as one where symptoms still occurred from time to time and medications were sometimes required).

Nine patients were no better (poor response). The nine children who showed no improvement plus nine from the group showing a fair response went on to a program of immunotherapy.

FOLLOW-UP: Table 6 shows the length of time these children have been followed.

Comment

The concept that upper respiratory illnesses in children are not infectious in every instance is not new. Years ago, Glaser[3] defined a group of children with recurrent upper respiratory illness of allergic origin. That group, much like the present group of children, gave a history of interval symptoms; a history of food intolerance could frequently be elicited; and skin testing showed a high percentage of positive reactions to house dust, environmental allergens, and molds, with uniformly negative or only mildly positive reactions to pollens.

The significance and importance of interval symptoms must be appreciated in order to correctly identify the allergic etiology for these illnesses. Interval symptoms are those symptoms which continue during the intervals between episodes of more severe illness. Mothers of children with the recurrent allergic upper respiratory illness syndrome will frequently comment that their children "Keep a cold all winter long," or "Just get over one cold before getting another." Comments such as these should alert the physician to the fact that he is probably dealing with an illness whose etiology is allergic rather than infectious.

When the etiology of recurrent wintertime upper respiratory illness is allergy, then treatment must be directed toward eliminating, to the extent possible, the offending allergen.

Table 4

SUMMARY OF ALLERGY SKIN TESTS

Skin Tests Positive for:	# of Patients
House Dust	98
Molds	74
Pollens	42
Foods	75

Avoidance of house dust is critical in the successful treatment of the child with recurrent wintertime upper respiratory illness. Table 4 underscores the point that a high percentage of children here described are sensitive to house dust. In an effort to eliminate house dust every child's mother is given a suggestion sheet to follow in instituting dust precautions. This suggestion sheet discusses the steps to be taken in creating a dust-free room. (See appendix)

The outline is reviewed in detail with the mother and especially important points are further emphasized. This discussion and review is always done by the physician and never relegated to para-medical or nurse assistants.

Foods are restricted if they have previously been shown to be poorly tolerated or definitely not tolerated. In addition, food showing a moderate or markedly positive skin test reaction are

Table 5

SUMMARY OF MODE OF TREATMENT AND RESPONSE

Mode of Treatment	# of Patients
Avoidance (A)	10
Avoidance & Diet Restriction (ADR)	104

Response	(A)	(ADR)	Total
Good	8	78	86
Fair	1	18	19
Poor	1	8	9

also restricted for a trial period. I am careful to emphasize that a positive skin test to a food does not necessarily indicate allergy to that food, and every child is subsequently rechallenged to each food which has been restricted. Only when reintroduction of a food is associated with reappearance of symptoms is the child designated as sensitive to that food.

The practical application of these principles of managing the allergic child is rewarded with success in over 80% of instances. In the present study, 96 of 114 children are essentially free of symptoms without need of medication or allergy immunotherapy.

Eighteen children have gone on to a program of immunotherapy while pertinent avoidance precautions are continued. All these children are doing well.

That 96 (84%) of the entire group of children with constant or near constant wintertime illness are well and free of symptoms reinforces existing concepts that avoidance of offending allergens (when this is feasible) is the single best method of treating the allergic child.

Table 6

SUMMARY OF FOLLOW-UP OF TREATMENT AND RESPONSE

Length of Follow-Up (Yrs)	# of Patients
0-1	29
1-2	21
2-3	26
3-4	21
4-5	15
>5	2

Conclusion

In summary, the following points would seem pertinent; 1) Many, if not most children with recurrent upper respiratory illness during the late fall, winter, and early spring are allergic children. 2) A careful program involving a real effort to reduce or eliminate exposure to offending allergens has had a beneficial effect in over 80% of these children.

Acknowledgements

I am most grateful to Warren Wheeler, M.D., who reviewed the manuscript and offered many important and helpful suggestions. I am also most appreciative of the efforts of Mrs. Beverly McKinney who patiently and carefully prepared the manuscript.

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Appendix

HOUSE DUST AND MOLD CONTROL

House dust or lint is a common cause of allergies including asthma, rhinitis, and eczema.

House dust is not the dust or dirt brought in from outside but is produced from upholstered and stuffed furniture, and woolly and fuzzy objects in the average home such as: overstuffed chairs, rugs, rug pads, mattresses, pillows, Chesterfields, and stuffed toy animals. This dust in the air is invisible except in a ray of bright light. It may also contain pollen grains, mold spores, and bacteria.

The most effective means of controlling symptoms due to house dust allergy is to remove the sources of house dust and other inhalants in the home. For a child, the most important room in which to control house dust is the bedroom where he or she spends approximately one-third to one-half of the time.

If you will carefully follow these instructions, you can eliminate much of the troublesome dust in your home.

How To Prepare a House Dust and Mold Free Bedroom

1. All cleaning and preparations should be done when the patient is out of the room or out of the house.

2. Remove all upholstered or cushioned furniture, pillows, stuffed toys, books, curtains, or drapes which are not washable, and all dust-catching ornaments. All rugs except small washable cotton throw rugs should be removed along with all rug pads. If the room has a closet, the closet should be cleared of everything except clothes in current use. The closet should **not** be used to store old clothes, bedding boxes, toys, books, and out-of-use household objects. Quilted or fleece-lined clothing, angora sweaters, fur-lined earmuffs, gloves, slippers, and out-of-season clothing should not be in the bedroom or closet.

3. Wash the ceilings and walls, over the door casings and window casings, baseboards, and floors. If there are open coil springs on the bed, these must also be washed. Damp dust all wooden furniture in the room using a cloth which is sprayed with Pride, Pledge, or some other appropriate cleaner. This thorough cleaning of the ceiling, walls, etc., should be done every three months, but the room must be damp dusted and either damp mopped or vacuumed daily.

4. The room should contain only one bed if possible. If there is more than one bed in the room, each bed must be prepared as will be directed. A couch or sofa with legs attached to the mattress or springs will not do.

5. Encase the mattress with a rubberized cloth or vinyl plastic encasing with a zipper with welded (not stitched) seams. The clear vinyl plastic covers must be replaced as soon as drying and cracking is noticed. Seal the holes left at the end of the zippered seams with a piece of adhesive tape. Box springs must be covered in the same manner. Despite many salesmen's statements to the contrary, "foam rubber box springs" contain upholstering materials and must be encased with a special cover as described above. You may be told that foam rubber mattresses are not available without a box springs. This is not so. It may be wise to consult with us before purchasing any box springs or other special bedding supplies or materials.

6. Upholstered furniture should not be used in the bedroom. Wooden or metal chairs or chairs covered with leather or leatherette and padded with synthetic material may be used.

7. Do not use stuffed comforters, quilts, or feather beds on the bed. Use only washable cotton or synthetic fiber blankets. The blankets should be washed once a week. Do not use a quilted cotton mattress pad on the bed. Special non-allergenic mattress pads are available. A plain cotton bedspread is the best to use. Do not use chenille or tufted candlewick spreads.

8. Pillows of foam rubber, dacron, or nylon chips, or some other synthetic fiber are permitted. Never use feather, down, or kapok pillows.

9. Do not allow the child to nap or sleep elsewhere unless the bed has been prepared as described above. If the child is sick in bed do not bring in an extra feather or down pillow from somewhere else. When he visits or travels, he should take his special pillow along.

10. Rag rugs or throw rugs which must be washed once a week may be used on the floor. Plain light curtains which must also be washed once a week can be used on the windows.

11. If your home has forced-air gas heat and there is a furnace outlet in the child's room, this outlet should either be covered with a filter or closed and sealed with masking or plastic tape.

12. During the pollen season, especially for pollen sensitive persons, the bedroom window should be kept closed or some type of window filters should be used in the open window.

13. Dust-sensitive children should not have stuffed dolls or animals which are stuffed with kapok or other allergenic material. This sort of toy is acceptable if it is stuffed with foam rubber or some other non-allergenic material.

Other Rooms

Since dogs, cats, and birds (feathers), are among the most notorious causes of allergic trouble, the patient should not live in a home where these pets are kept. If not already allergic to these animals, their presence invites the child to become sensitive to them.

The improvement which follows attention to house dust in the bedroom can, if necessary, be increased by changes along similar lines in playrooms and the room where the T.V. is located. Feather and kapok pillows, old upholstered furniture, and hair rug pads are especially troublesome. A house dust-sensitive child may be especially aggravated by watching T.V. over a long period of time while lying on dusty rugs or sitting on old upholstered furniture. It is best to watch TV while sitting in a plain wooden or plastic chair or bean bag rather than lying on the floor.

Solid or shredded foam rubber and dacron can be used to replace feather or kapok in pillows. Before replacing rugs or upholstered furniture feel free to consult with us concerning suitable materials and the most useful way to spend your money in acceptable furnishings.

The allergic child should avoid handling dusty objects such as books, boxes, or clothing that have been stored in cases, trunks, chests, or attics over long periods, and should not go into attics, closets, or storerooms or rummage in drawers.

The suggestions and the precautions discussed above are frequently all that needs to be done to render a child who is dust-sensitive completely free from symptoms. Since this is true, it is always worthwhile to make the best effort in carrying out these suggestions.

Once the original cleaning has been done and the changes recommended have been carried out, then the day-to-day maintenance of this room is comparatively simple. It requires mostly a lot of "elbow grease."

Since this type of therapeutic program, that is, avoidance of the offending substance, is the best treatment plan available for the allergic person, the above precautions need to be continued for many years even after symptoms have completely disappeared.

Coronary Bypass Grafts
Current Indications and Experience

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Coronary bypass grafting has become the most common open heart surgical procedure throughout the country.

THE procedure was not adopted locally until late 1971 when the opening of the Thomas Cardiovascular Laboratory made accurate coronary arteriography possible. Since then 474 patients have undergone a coronary bypass graft alone or with an associated procedure up to June 30, 1975.

Our present indications for study of patients with coronary artery disease include those with chest pain of uncertain etiology, angina that has increased in frequency or severity, preinfarction angina, a strongly positive treadmill test, or patients who have continuing pain or congestive heart failure following myocardial infarction. In addition, a few patients with intractable arrhythmias or low cardiac output during the acute myocardial infarction have been studied as an emergency measure.

Operation is usually undertaken for patients with proved coronary artery disease who are Class III or Class IV functionally, those with angina that is increasing in severity despite medical therapy, preinfarction angina, and patients with very threatening lesions such as those involving the main left coronary or the origin of the left anterior descending. Congestive heart failure has not been an indication for bypass grafting, but patients with severe angina will be accepted for operation in spite of heart failure. No patient has been refused operation on the basis of age, previous myocardial infarction, or poor left ventricular function.

Materials and Methods

Four hundred and thirty patients underwent only coronary bypass grafts, their ages varying from 31 to 79 years. Of the 430 patients, 78% were males. The frequency of single, double, triple, and quadruple grafts by year is shown in Table 1. This table also shows that a previous myocardial infarction was present in 207 patients, almost half. Seventy-one patients were over 60 years of age. Poor left ventricular function with an ejection fraction of 15-30% was present in 62 patients, a group that is ordinarily considered a poor risk for operation. In addition to those who underwent coronary grafts alone, 44 more had simultaneous repair of associated defects as indicated in Table 2. Thirteen had aortic valve replacements, 16 mitral replacements or valvotomy, and 13 resections of a ventricular aneurysm.

The operation was performed in the first two years at normothermia and then at mild hypothermia (28-30° C.). The Travenol disposable oxygenator was used, primed with one-half Ringer's lactate and one-half 5% D/W. Perfusion was through the femoral artery in most instances, but through the aorta if significant iliac or femoral arteriosclerosis was present. Ventricular fibrillation was induced and aortic cross-clamping was used during the performance of the distal anastomoses. In the first two years the proximal anastomoses were done with partial exclusion clamps, and in the last two with a second period of aortic cross-clamping.

Postoperatively the patient was monitored in the intensive care unit for two to three days. Ventilation through the endotracheal tube was carried out for 2 to 24 hours and the EKG, heart rate, blood pressure, respiratory rate, temperature, urinary output, and chest tube drainage were recorded. Most patients received a slow infusion of isoproterenol for 24 hours, and lidocaine and intravenous potassium were used as indicated. Anticoagulation was not employed unless phlebitis or pulmonary embolism was suspected.

Results

The operative mortality for coronary bypass grafts alone is shown in Table 1. It varies from 3.4 to 5%, and in fact was 2-3% before 1975. Six of the deaths occurred in the operating room as a result of myocardial infarction. In two of these cases this was confirmed by autopsy and the

Table 1

CORONARY BYPASS GRAFTS

Year	Number of Grafts: Single	Double	Triple	Quadruple
1971-1972	30	29	3	0
1973	21	27	12	0
1974	23	79	58	1
1975 (6 mos.)	13	63	68	3
TOTAL	87	198	141	4
Previous MI	30	98	77	2
60 yrs. old	20	27	22	2
Poor LV (EF 15-30%)	8	31	23	0
Mortality				
Operative	3.4%	5%	4.2%	0%
OR	(1)	(4)	(1)	(0)
Hospital	(2)	(6)	(5)	(0)
Late	3.4%	1.5%	1.4%	0%
Averages				
Total bypass	37 min.	55½ min.	69 min.	91 min.
Hospital stay	15 days	12 days	14 days	12 days
Blood (OR & RR)	.75 units	1.1 units	1.9 units	1 unit
Follow-up				
Angina free	59/87 (68%)	139/198 (70%)	104/141 (74%)	100%
Restudy	28	28	10	0
Open	82%	75%	73%	—

LEGEND: MI=myocardial infarct; LV=left ventricle; EF=ejection fraction; OR=operating room; RR=recovery room.

others were made on the basis of pulmonary hypertension, systemic hypotension, changes in the EKG, and appearance of the myocardium. Only one of these had good left ventricular function preoperatively with no history of previous myocardial infarction. The other five had poor left ventricular function and a history of previous myocardial infarction, two had longstanding severe hypertension, and one had undergone a bypass graft four years before. This graft had thrombosed and on repeat catheterization he had poor left ventricular function and triple coronary artery disease. None of the patients who died had tachy-arrhythmias, ventricular fibrillation prior to surgery, preinfarction angina, or an evolving myocardial infarction prior to surgery. Preoperative medications such as propranolol or digitalis could not be incriminated.

Another 12 deaths occurred in the hospital, three in the first day and nine at a later date. In each of the three deaths in the first day the preoperative condition of the patient was responsible. One of them had an evolving myocardial infarction and was taken to the operating room as an emergency in a state of tachycardia, nausea, hypotension, and recurrent ventricular tachycardia and cardiac arrest before operation. She was resuscitated and a triple bypass graft was done, but she died a few hours later of an extensive myocardial infarction. The other two patients had poor left ventricular function preoperatively: one died of recurrent ventricular fibrillation with autopsy findings of multiple old infarcts in the left ventricle and an embolus to the right coronary bypass graft, while the other patient died of low cardiac output.

The causes of death in the other nine patients who died in the hospital included four cardiac causes, two cerebral, and three unrelated diseases. The four patients who died of cardiac causes were suspected of having subacute or acute myocardial infarction and died two to eight days after operation. One died with ventricular fibrillation and documented myocardial infarction, one of ventricular fibrillation without infarct, a third with ventricular fibrillation, low cardiac output, and myocardial infarction, and a fourth with tachycardia and low cardiac output without infarction. One patient died of diffuse cerebral damage caused by poor perfusion while he was on the pump and another suffered a cerebral infarct two days after operation without history of arrhythmia, low cardiac output, hypertension, or previous cerebral ischemia. Autopsy in this case showed an embolus to the left middle cerebral artery, but the source was not identified.

Two of the three patients who died of other causes suffered massive GI hemorrhage and died three and five days after operation. The first patient had mediastinal bleeding postoperatively and was explored twice without finding a cause for the bleeding. Twelve hours after the second exploration, GI tract bleeding began and an autopsy revealed he had no peptic ulcer but had a jejunal infarction. The third patient had a catheter inserted for urinary retention 12 days after operation and developed bacteremia and finally mediastinal infection. The infection was controlled but he eventually died of heart block, hepatorenal failure, and perforated ulcer.

After the patients left the hospital, the mortality rate over six months to four years was 1.4 to 3.4% (Table 1). One patient died 10 months after the operation following a radical surgery for carcinoma of the cervix. Sudden death associated with a thrombosed graft was identified in two patients, and one patient died of congestive heart failure five weeks after undergoing aortic and

mitral valve replacement along with coronary graft. Most late deaths were from undetermined causes since specific information was not available, but in many of these patients poor left ventricular function was present preoperatively and a ventricular arrhythmia was suspected.

The morbidity for the procedure has been relatively minimal. The common postoperative complications include atelectasis, arrhythmias, and postoperative myocardial infarction. Significant bleeding requiring a return to the operating room has been rare, occurring only five times in this group. Low cardiac output in the postoperative period has occurred with poor ventricular function preoperatively or intraoperative myocardial infarction.

The average period of cardiac bypass for single, double, triple, and quadruple grafts is also shown in Table 1, and we believe that the short period of bypass has led to the low incidence of significant morbidity or mortality in spite of poor ventricular function of many of the patients. The hospital stay is also shown in this Table, and usually includes two days before the operation and ten days after. Blood use in the operating room and during the first 12 hours after operation is also shown in this Table. Again, the use of a non-blood prime, short perfusion time, and accurate hemostasis have kept the blood requirements to a minimum, averaging one to two units per patient.

The patients have been followed by regular return visits to the office at four weeks, three months, six months, one year, and every six months thereafter. If the patients do not return after the first year, a report from the cardiologist is obtained. Approximately 70% of the patients are completely angina free (Table 1), and are on no medication for chest pain. Recently 170 patients who underwent a double coronary bypass graft since 1972 were surveyed, and 149 were angina free (90%) and 154 were free of congestive heart failure.

The cause of recurrent chest pain in some of the patients is not known, but whenever possible they are subjected to repeat coronary arteriograms. This study is suggested to the patient as soon as he develops any symptoms, and often is immediately accepted because of his anxiety. Sixty-six patients having received a total of 114 vein grafts (28 single, 28 double, and 10 triple) were subjected to postoperative coronary arteriography 4-26 months after surgery. The graft patency rate was 82% in patients with single grafts (23/28), 75% in patients with double grafts (42/56), and 73% in patients with triple grafts (22/30), on the average 10 months postoperatively. Thus 66 of the 430 patients (15%) have been restudied because of chest pain, only 18 of them had an occluded graft, and the patency rate for the group is 76% (87 of 114 grafts). It is presumed that it would be higher in the asymptomatic patients, although this may not be true. In all 18 patients with occluded grafts, typical or atypical angina recurred within one to six months after the operation, and 13 of them returned to a functional Class III or IV.

Forty-four patients who underwent an associated operative procedure along with coronary graft are shown in Table 2. In the ten who underwent aortic valve replacement, there were four deaths. Three others underwent mitral replacement or repair of a dissecting aortic aneurysm along with aortic replacement and coronary graft. All three left the hospital, but two died later, one of graft thrombosis and the other of continued congestive failure. Fifteen patients had mitral valve replacements with single, double, or triple bypass graft and one had a valvotomy with a single graft, there being no deaths in this group. Thirteen patients with heart failure underwent resection of a left ventricular aneurysm along with a single coronary bypass graft in six and a double graft in seven. The only death in this group was one patient with low cardiac output and recurrent ventricular arrhythmias as a result of an infarct suffered about three weeks before. The one patient who had a double graft along with repair of an atrial septal defect survived. The patient

Table 2

CORONARY GRAFTS WITH ASSOCIATED PROCEDURES

	Number of Grafts		
	Single	Double	Triple
AVR	5 (2)	5 (2)	——
AVR + MVR*	2 (0)	——	——
AVR + Asc. AAn	1 (0)	——	——
MVR*	10 (0)	5 (0)	1 (0)
LVAn	6 (1)	7 (0)	——
ASD	——	1 (0)	——
VSD	——	1 (1)	——
Total	24 (3)	19 (3)	1 (0)

LEGEND: AVR = aortic valve replacement; MVR = mitral valve replacement; Asc. AAn = ascending aortic aneurysm; LVAn = left ventricular aneurysm; ASD = atrial septal defect; VSD = acquired ventricular septal defect. ( ) = number of deaths.

*One case of mitral valvotomy instead of replacement.

who had repair of a post-infarction ventricular septal defect along with a double bypass graft was operated upon under conditions of shock, low cardiac output, pneumonia, and hepatic and renal failure, and he did not survive.

Discussion

This experience indicates that coronary bypass grafts can be performed at a low risk of about 4%, despite the fact that all patients are accepted regardless of age, previous myocardial infarction, poor left ventricular function, weight or smoking habits. Of the patients who are operated upon, approximately 70% will remain free of angina up to four years after operation. Even in those patients with recurrent chest pain, 76% of the grafts have been demonstrated to be patent and over 70% of them have no graft occlusion. In these patients, restudy has been very helpful to the physician and reassuring to the patient in that the chest pain loses its threatening significance.

Coronary bypass surgery has two main objectives: relief of angina and resumption of normal activity, including return to work. A program for recuperation and rehabilitation is explained to the patient preoperatively, and instituted immediately after. He is in the intensive care unit two to three days and then returns to the regular ward. He graduates rapidly from bed to chair and ambulation, and should be walking freely in the halls by discharge in ten days. His medications include digitalis for three months, a diuretic every other day for two months, and sleep and pain medication as required. No drugs for angina or anticoagulation are prescribed. At home, the patient gradually increases his activity, including driving after two weeks, and walking a mile a day by four weeks. His appetite will improve and sleeping habits will be back to normal by the same time. At the end of the ten weeks the sternum is healed, and he should be able to do heavy lifting, play golf, or swim. The family practitioner and the cardiologist follow the patient postoperatively, and an EKG, treadmill test, and lipid profile are obtained as indicated. If the patient complains of persistent chest pain, recatheterization is suggested for information and reassurance. It is our impression that the frequency with which patients return to work or their previous normal occupation is lower than expected, although it is not known exactly for this series. Many times this is due to the patient's age, other pre-existing disease conditions, or reluctance of the employer, but unfortunately at times it is hesitancy on the part of the physicians. A stronger, more positive rehabilitation program is definitely needed and is part of our long-range planning.

The causes of death can be divided into intraoperative, hospital, and late deaths. The intraoperative deaths were due to myocardial infarction, and in all but one case were associated with poor left ventricular hypertrophy associated with hypertension or severe aortic stenosis. However, many other patients had one or more of these factors, and did well. Propranolol therapy could not be incriminated and, although we routinely discontinue this drug two days before the operation, we do not hesitate to use it up to the time of operation if the severity of the patient's angina requires it. Deaths within the first 24 hours after operation were caused by the desperate state of the patient before he was taken to the operating room including an evolving myocardial infarction with shock or recurrent ventricular arrhythmias with low cardiac output. The later deaths in the hospital were caused by ventricular fibrillation in three instances and low cardiac output in another. Two patients suffered cerebral infarctions, two had massive upper GI bleeding, and a final patient had mediastinal infection and hepatic and renal failure that followed catheterization of the bladder with subsequent bacteremia 12 days after operation.

Occlusion of the vein grafts is a serious complication since it contributes to poor functional results. Therefore, patients with occluded grafts were studied, and the preoperative coronary angiograms, operative findings, postoperative course, and postoperative arteriograms reviewed in an effort to define causes of graft failure. Many factors may influence the patency of aorto-coronary saphenous vein grafts. Significant hemodynamic factors are competitive flow between the vein graft and a coronary artery with noncritical stenosis, diffuse disease in the outflow (poor run-off), and selection of arteries with a lumen diameter less than 1.5 mm. Important technical factors include the preparation of the vein graft, construction of the anastomoses, and the final position of the graft. Intimal fibrous proliferation as the result of new hemodynamic conditions may induce late occlusion of the saphenous veins.

It was not possible to define with certainty the contributing role of any of the above-mentioned factors to graft occlusion that occurred in 18 patients in this series. Early occlusion could be induced by hypotension associated with excessive bleeding or severe arrhythmias in the immediate postoperative period, but a significant hypotensive episode occurred in only one of these patients. It seemed that technical difficulties or kinking encountered in the construction of the distal anastomosis could have contributed to four of 27 graft failures. Poor run-off was present in two other occluded grafts and flow competition due to non-critical proximal stenosis of the native artery could be invoked in one additional case. In the remaining 20 graft occlusions, no definite cause could be elicited.

Technical failures are prevented by attention to surgical technique. Careful study of the preoperative angiogram, selection of a soft and pliable segment of artery with a diameter of at least 2 mm if possible, and avoidance of trauma to the graft and coronary artery should ensure the best chance for patency of the distal anastomosis. To minimize the importance of late intimal proliferative changes in the grafts, the proximal portions of healthy long saphenous veins are selected. The veins are left in continuity until shortly before use and are prepared with a minimum of handling by harvesting them through long single incisions, avoiding overdistention, and preserving the periadventitial tissue. Finally, the distal and proximal anastomoses are constructed with optimal angles to permit smooth blood flow and allow the best position of the graft on the surface of the heart.

Coronary bypass grafting has been combined with valve replacement, resection of ventricular aneurysm, and repair of other defects. The operative mortality for these combined procedures has not been changed except in the case of aortic replacement with coronary grafting. Our previous experience indicated that aortic valve replacement should have an operative mortality of about 3% whereas in this group it was 40%. Although these patients had severe aortic stenosis, their situation was not appreciably different from the group who underwent aortic valve replacement alone. We could not determine the cause for this discrepancy, although other groups have had a similar experience.

The patients with poor left ventricular function were of particular interest. Many of these should have been turned down for operation because of an ejection fraction of 15-30%. In fact, there were only two deaths in these 62 patients, and one of these deaths was in a patient whose ejection fraction was estimated at 5%! Thus, the operative mortality in these patients was no more than in the group as a whole.

Postoperative myocardial infarction has been reported to occur in about 15% of patients in other large series. It apparently does not affect the survival or the end result unless it is massive and occurs in the operating room. The diagnosis of infarction outside the operating room is extremely difficult since ST segment changes are almost universal, and the enzymes are completely unreliable. In comparing enzyme changes in the first five days after coronary bypass graft with those in patients who underwent valve replacement or other forms of open heart surgery, we found that the elevation of the enzymes correlated only with the duration of cardiopulmonary bypass, but not with the performance of coronary bypass, the number of grafts, the EKG changes, or the postoperative course of the patient.

The chronological age of the patient has not been considered in reaching a decision about whether or not to perform a coronary graft, but instead his physical activity, mental status, and apparent life expectancy. In the present year of 1975, coronary grafts have been performed in 11 patients 65-69 and seven patients 70-74. There was only one operative death in this group (5.5%), none has died since leaving the hospital, and all are still angina free. There was only one complication, a left hemiparesis from which the patient is slowly recovering. Thus the early risk and outcome were the same in the Medicare age group as in the rest of the patients.

Summary

Coronary bypass grafting for the treatment of angina can be done with an operative risk of about 4%, even in patients over 65 years old or with a left ventricular ejection fraction of only 15-30%. Associated procedures done at the same time, such as mitral replacement or resection of ventricular aneurysm, did not increase the risk, but aortic replacement carried a much higher mortality. Up to four years later, 70% of the patients were free of angina. In those with recurrent chest pain, coronary arteriograms demonstrated that the overall graft patency rate was 76% even in this group, and in fact over 70% of such patients had all grafts patent.

GRAND ROUNDS

The University of Kentucky College of Medicine

This Journal feature will be presented alternately by the University of Louisville and the University of Kentucky Departments of Medicine and Departments of Surgery. We hope to have these features revolve around subjects of immediate practical interest to the practicing physician; and, for those of us not able to attend grand rounds in the teaching centers as often as we might, we hope this will represent a bit of a refresher course.

Bacterial Meningitis: A Review of the Pathophysiology, Diagnosis, and Treatment†

DESPITE the availability of effective antibiotic therapy, bacterial meningitis remains a cause of significant morbidity and mortality in the afflicted individuals. The following summarizes and updates the etiologic agents, pathophysiology, diagnosis, and treatment of bacterial meningitis.

Introduction

Acute meningitis (acute leptomeningitis) may be defined as infection of the pia mater and arachnoid with involvement of the subarachnoid space. Acute bacterial meningitis has always been a devastating disease, and prior to the antimicrobial era, pyogenic meningitis was fatal with rare exceptions[1].

The incidence of bacterial meningitis has remained almost the same over the past 40 years, affecting approximately 5 per 100,000 population.[2-4] The majority of these are children less than 15 years old. This accounts for approximately 25,000 cases per year in this country, and of these about 2,200 die.[5] Conservatively estimated, about 4-5,000 have significant residual complications. Bacterial meningitis tends to have the highest incidence in the winter, but occurs throughout the year. Some studies show a preponderance of males over females in a ratio of about 3:1, but this is not substantiated in other studies. The incidence is age-related; about 15% of cases occur in children less than one month of age, 37% before age one year and 75% before 15 years of age. The mortality also varies with age, being highest in the first year of life and in the elderly. The risk of contracting meningitis was recently found to be greater in urban than in rural areas in Tennessee.[5] This same study also confirmed previous reports that rates for *Streptococcal pneumoniae* (pneumococcus) and *Hemophilus influenzae* were greater in blacks than in whites.

Etiologic Agents and Pathophysiology

Table 1 shows a comparison of the commonest etiologic agents, *Neisseria meningiditis, Streptococcus pneumoniae,* and *Hemophilus influenzae* in five large series covering segments of the years 1948-1970.[2,3,6-8] These three pathogens accounted for approximately 70% of all cases of meningitis.

Streptococcus pneumoniae or pneumococcus is the most common etiologic agent in adults. It is the most common cause of recurrent meningitis in all ages. This gram-positive diplococcus is lancet-shaped and exhibits a positive Quellung reaction or capsular swelling when exposed to specific antibody. The incidence of pneumococcal meningitis is highest in both the elderly and the very young. Predisposing factors include head trauma, alcoholism, splenectomy,[9] sickle cell disease, and multiple myeloma. Persons with sickle cell disease have a risk approximately 500 times greater than the general population for developing pneumococcal meningitis.[10] A history of severe head trauma is significantly more frequent in those with recurrent pneumococcal meningitis (35.3%) than in those without recurrences (9.4%). The history of head trauma, usually six months or more prior to the initial episode of meningitis, is often overlooked even in the presence of cerebrospinal fluid rhinorrhea.[11] Therefore, any patient

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presenting with pneumococcal meningitis should be evaluated for evidence of dural tears or other host defense defects.

N. meningiditis is the principal pathogen in the pediatric age group. This gram-negative, kidney-bean shaped diplococcus may be found intracellularly in leukocytes in a gram stained preparation of infected cerebrospinal fluid. The meningococcus is classified into ten groups, but groups A, B, and C account for the majority of cases. Major epidemics in the past have been due to group A strains, however later, group B and, more recently, group C strains are the predominant serogroups associated with severe clinical disease.[5] In the epidemic year 1971, 63% of the meningococcal strains submitted to the Center for Disease Control were group C. All groups contain some strains with sulfonamide resistance. The occurrence of petechiae or purpura, present in about 50% of cases of meningococcal meningitis, can be helpful in the diagnosis; but petechiae and purpura also occur in meningitis or encephalitis caused by the Echovirus, *H. influenzae* and *S. pneumoniae*.[7]

H. influenzae is a pleomorphic, gram-negative rod, whose shape varies from a coccobacillary form to a long, curved rod. Because it is gram-variable and pleomorphic, it is difficult to identify in initial gram stains of the cerebrospinal fluid.[12] *H. influenzae* also demonstrates a positive Quellung reaction with specific antisera. Nearly all cases of *H. influenzae* meningitis are caused by organisms containing type b capsular polysaccharide.

The list of unusual pathogens is lengthy, and includes *Staphylococcus,* alpha and beta hemolytic *Streptococcus, E. coli* and other coliforms, *Pseudomonas* species, *Listeria, Pasturella multocida, Clostridium, Salmonella,* and many others which vary according to the particular series. These unusual pathogens appear predominantly in the neonate and the elderly. Head trauma, neurosurgical procedures, and invasive CNS diagnostic procedures are predisposing factors in meningitis due to unusual pathogens.

Of the three major pathogens, the causative organism may be cultured from the cerebrospinal fluid in about 90% of cases. Unknown organisms account for approximately 10% of cases in most series. Some series have found a positive correlation between preliminary antibiotic therapy and failure to recover an organism,[7,34,35] but this finding was not substantiated in other series.[3] A short duration of disease prior to lumbar puncture has also been suggested as a cause of failure to isolate a pathogen from the cerebrospinal fluid or blood.[3]

The extent of central nervous system infection and pathology directly influences the type and severity of complications of acute bacterial meningitis. Central nervous system complications are frequent and include subdural effusion (most commonly caused by *H. influenzae*), altered consciousness, seizures, focal cerebral signs, cranial nerve signs, increased intracranial pressure (which may infrequently lead to death following lumbar puncture), and water intoxication (syndrome of inappropriate ADH secretion). Subdural empyema and brain abscesses are severe complications of bacterial meningitis and fortunately have a low incidence. The superb monograph by Dodge and Swartz[7] carefully delineates the incidence and spectrum of each of these

Table 1

ETIOLOGY OF BACTERIAL MENINGITIS

Etiologic Agent	'50-'60 Seattle[1]		'48-'58 Mayo Clinic[2]		'52-'62 Boston[3]		'60-'65 Copenhagen[4]		'59-'70 Minnesota[5]	
	% Cases	% Fatal	% Cases	% Fatal	% Cases	% Fatal	% Cases	% Fatal	% Cases	% Fatal
N. meningiditis	25	13	13	8	19	13	29	1	19	
S. pneumoniae	30	59	37	19	27	21	21	21	22	29
H. influenzae	17	18	16	11	25	8	19	3	34	5
Other	18	57	39	24	20	46	13	26	22	64
Unknown	10		19	12	9	11	18	11	3	
Total # Cases	209		294		207		356		167	
Total % Fatal		55%		17%		20%		11%		37%

1 Carpenter and Petersdorf, Amer. J. Med. 33:262, 1962.
2 Eigler, et al., Proc. Mayo Clin. 36:357, 1961.
3 Swartz and Dodge, New Engl. J. Med. 272:842, 1965.
4 Jensen, Renek, and Rosdahl, Scand. J. Inf. Dis. 1:21, 1969.
5 Fraser, Henke, and Feldman, J. Inf. Dis. 128:300, 1973.

complications. The incidence of late neurologic sequelae was reported as 21% of surviving infants and children in this study, but a more recent study has shown subtle psychological and intellectual impairment in most post-meningitis school-aged children.[25] This emphasizes the need for prevention rather than reliance on cure of meningitis.

Adams and Petersdorf have presented an excellent pathological-clinical correlation between infectious pathology and neurologic manifestations.[23] Neurologic signs and symptoms may result from (1) acute infectious pathology (pure piarachnoiditis, subpial toxic encephalopathy, inflammatory or vascular involvement of cranial nerve roots. thrombosis of meningeal veins or choroidal plexitis), (2) subacute or chronic pathological changes (obstructive or communicating hydrocephalus, subdural effusion or empyema, extensive venous or arterial infarction), or (3) late pathological sequelae (meningeal fibrosis around optic nerve or spinal roots, severe cerebral damage, or persistent hydrocephalus in children).

The meningeal reaction plays an important role in the development of neurologic sequelae. The amount of exudate in the sub-arachnoid space varies widely and is apparently related to the organism, the host response and the time between the onset of infection and death. Purulent material may accumulate over the convexity of the brain, in the Sylvian fissures and along major veins and venous sinuses. This meningeal reaction is thought to play a part in the "meningeal signs", cranial nerve pathology (except perhaps cranial nerve 8), increased intracranial nerve pressure and development of hydrocephalus.[7]

Vascular and parenchymal involvement is associated with exudative meningitis which leads to polymorphonuclear infiltration extending to the subintimal region of small arteries and veins. In many cases, the process continues to thrombosis of many of the small cortical veins with associated necrosis of the cerebral cortex.[7] This may produce an abnormal brain scan showing a mass effect secondary to bacterial meningitis in the absence of intracranial mass lesions.[26] The occlusion of major venous sinus, while uncommon, does occur. Necrosis of the cerebral cortex can occur in the absence of thrombosis of small vessels. This type of necrosis is most common subjacent to areas of heavy subarachnoid exudate. No bacteria are found in these lesions and the pathological changes are viewed as a non-infectious subpial toxic encephalopathy of uncertain cause. Direct invasion of the brain substance by bacteria has also been demonstrated in pathological specimens.

Whatever the combination of mechanisms, damage to the cerebral cortex is an adequate explanation in most cases for seizures, coma, focal signs, and some instances of sudden death prior to or unassociated with lumbar puncture.[7] Focal signs in meningitis are usually related to cortical necrosis and/or occlusive vasculitis when they appear early. Impaired occular movement was the most frequently encountered sign of cranial nerve dysfunction in the Boston series.[7] However, damage to the 8th cranial nerve complex continues to be the most important late sequela of meningitis in adults in many series.[3,5,7] When focal signs appear late (10-14 days of hospitalization) and after apparent clinical recovery, delayed thrombosis of cortical veins is the suspected mechanism. Prominent and persisting focal cerebral signs always bring about questions of an associated focal process (brain abscess, subdural empyema, or bacterial endocarditis with embolism).

A moderate to marked elevation in CSF pressure is the rule in bacterial meningitis. The Boston series recorded a mean pressure of 307 mm of water with a range of 50-600 mm of water.[7] The level of CSF pressure is not a reliable prognostic index.

Papilledema is rare even with increased CSF pressure[7] and its presence demands consideration of other diagnostic possibilities: brain abscesses, subdural empyema, and occlusion of a major venous sinus. Multiple factors may contribute to the increased CSF pressure, such as impaired circulation of CSF due to pus in the subarachnoid space and ventricles and cerebral swelling.

The occurrence of cerebral swelling and herniation of the temporal lobe or cerebellum has been noted in most series. This occurs more often in patients dying early. Concern over the hazards of lumbar puncture are appropriate in the presence of increased CSF pressure, but the dangers of LP appear small when compared with the events that follow a missed diagnosis of bacterial meningitis. Morbidity is directly related to the extent of CNS infection, and mortality is increased with a delay in diagnosis or improper diagnosis.

Non-CNS complications include septic arthritis, pericarditis, purulent conjunctivitis, adrenal hemorrhage, hypotension, dermal necrosis, myocarditis and consumption coagulopathy.[2,15,,23,24]

Pericarditis may be seen with pneumococcal meningitis.[2]

Laboratory Diagnosis of Acute Bacterial Meningitis

The traditional methods of diagnosis in acute bacterial meningitis are the blood and CSF cultures and the Gram stain of the cerebrospinal fluid. Of the three major causative organisms, CSF cultures were positive in 80-90% of cases.[2,3,7] In the remainder, diagnosis was established by positive blood cultures or characteristic gram-stained organisms seen in the cerebrospinal fluid smears.

A Gram stain and Wayson's stain should be done on all CSF obtained in cases of suspected meningitis. The Wayson's stain contains methylene blue and carbofuchsin, and stains *H. influenzae* and other gram-negative organisms blue. When many cells or much protein is present in the CSF, the Gram stain background will appear pink—frequently obscuring gram-negative bacteria. Gram-negative organisms that were missed on a Gram stain, may frequently be found on the Wayson's stain.

The most common error in reading gram-stained smears of cerebrospinal fluid is either misinterpretation of precipitated dye or debris as gram-positive cocci or confusion of the pneumococcus with *H. influenzae*. Hemophilus organisms may stain heavily at the poles so that they may resemble gram-positive cocci.[7,23] In a study from Seattle, the house officers' interpretation of characteristic organisms was proved correct by culture in 91% of cases.[2] Thus, the Gram stain is a helpful diagnostic aid even in relatively inexperienced hands and allows for more specific antibiotic therapy.

The technique of lumbar puncture has been recently reviewed.[27] The typical CSF findings in bacterial meningitis are: (1) elevated pressure above 180 mm of water, (2) depressed sugar concentration, usually lower than 40 mg/100 ml or less than 40-66% of the blood sugar, (3) elevated protein (higher than 45 mg/100 ml in 90% of cases), and (4) pleocytosis. In a case of suspected bacterial meningitis, normal or low pressure of the initial lumbar puncture should raise the possibility that the needle is partially blocked. Increased CSF pressure has been reported in diabetics with ketosis, and this may present a problem of differential diagnosis in a febrile diabetic with altered consciousness.[28]

Hypoglycorrhachia (low CSF sugar concentration) has been reported in a variety of conditions including diffuse meningeal neoplasm or meningeal carcinomatosis,[29-32] sarcoidosis,[33] hypoglycemia from any cause, viral encephalitis due to mumps or herpes virus, fungal or tuberculous meningitis, and subarachnoid hemorrhage.[23] There is no correlation between the etiologic agent and the amount of glucose in the CSF.[7]

Two series from the pediatric literature[34,35] show that antibiotic therapy given prior to lumbar puncture did not produce significant differences in CSF properties.

Pleocytosis of the cerebrospinal fluid is characteristic. The number of leukocytes in the CSF ranges between 1-100,000 per microliter but averages 5-20,000.[23] Cell counts above 50,000 raise suspicion of the possibility of a brain abscess having ruptured into the ventricle (ventricular empyema). The differential cell count in bacterial meningitis almost invariably includes a preponderance of polymorphonuclear leukocytes, but early in the course of viral or tuberculous meningitis this cell type may also predominate. The value of a repeat lumbar puncture in the differential diagnosis of meningitis, particularly when viral meningitis is suspected, has recently been stressed.[25] While the initial lumbar puncture in aseptic meningitis often showed 70-80% polymorphonuclear cells, a repeat LP 6-72 hours later showed only 30-35% PMN's depending on the time interval. However, the suspicion of bacterial meningitis should be heightened when pleocytosis exceeded 1,000 cells per cc with a predominance of PMN's, and that if, in addition, CSF glucose was less than 40 mg/100 ml or less than 66% of a simultaneous blood glucose, antibiotic therapy should be started immediately. Cases of acute bacterial meningitis with absent or minimal CSF abnormalities have been reported.[37]

Non-infectious causes of CSF pleocytosis include the following: subarachnoid hemorrhage, meningeal carcinomatosis, leukemia, sarcoidosis, and systemic lupus erythematosis.[38] Bacterial endocarditis with embolization may also result in white cells (usually less than 100 per cc) and red cells in the spinal fluid. Infections adjacent to the leptomeninges such as brain abscess and subdural empyema also cause CSF abnormalities.

While CSF examination and culture are most productive in establishing the etiology of bacterial meningitis, blood cultures are also a helpful method of establishing a bacterial etiology.[2,3,6,7] Swartz and Dodge found blood cultures were positive in 56% of patients with pneumococcal meningitis, 79% of patients with *H. influenzae*

meningitis, and 33% of patients with meningococcal meningitis. Examination of smears of material obtained from petechiae may be helpful in making an early diagnosis of meningococcal disease.

Newer methods are being developed to increase the rapidity of diagnosis of bacterial meningitis. Counterimmunoelectrophoresis has recently been shown to be a rapid and highly specific means of diagnosing acute bacterial meningitis.[39-42] The CSF containing the bacterial antigen is tested against very high titer specific antibody to suspect organisms. This method has been used mainly to identify the three primary pathogens, *N. meningiditis, H. influenzae,* and *D. pneumoniae.* The presence of soluble antigen is indicated by a line of precipitate with the appropriate antiserum. A latex-agglutination test has also been developed for use in bacteriological diagnosis of pyogenic meningitis.[43] This test depends upon agglutination of coated latex particles by bacterial antigens released into the CSF. It is reported to be positive in a high percentage of patients with meningococcal, pneumococcal, and *H. influenzae* meningitis, and is reputed to be as sensitive as countercurrent immunoelectrophoresis. Whether these techniques will become popular as practical methods for rapid diagnosis of bacterial meningitis remains to be determined.

Treatment

Management of acute bacterial meningitis may include the treatment of shock, seizures, or cerebral edema. Management of these problems has been presented elsewhere,[5,54] and this discussion will be limited to antimicrobial therapy.

The most likely etiologic agent according to age group with recommended initial therapy of choice is shown in Table 2.[12,14-16,54] The recommendations for initial antimicrobial therapy apply to cases of meningitis in which the exact etiologic agent is unknown. From birth to 30 days, a variety of organisms may cause purulent meningitis. The gram-negative enteric organisms continue to be important etiologic agents, but the group B *Streptococcus* has emerged as the single most important agent.[14] *Listeria* is another important etiologic agent of neonatal meningitis. The wide variety of pathogens emphasizes the need for meticulous bacteriologic studies (CSF cultures and gram stain smears, blood cultures, and antibiotic susceptibility testing) and the need for broad antibiotic therapy until culture results are available.

Table 2

PROBABLE ETIOLOGIC AGENT ACCORDING TO AGE GROUP

Age Group	Predominant Pathogen	Initial Therapy
Neonate (Up to 2 months)	Group B streptococci E. coli and coliforms Staphylococcus aureus Enterobacter aerogenes Proteus vulgaris Pseudomonas aeruginosa Listeria monocytogenes	Ampicillin and gentamicin (if CSF is not sterile in 24 hrs, add intrathecal gentamicin). Should repeat lumbar puncture 24-48 hrs.
First Year	H. influenzae S. pneumoniae (pneumococcus) N. meningiditis Unknown	Ampicillin for suspected H. flu Penicillin for suspected meningococcal or pneumococcal meningitis
1-20 Years	N. meningiditis * S. pneumoniae H. influenzae	Same as above
Adult < 50 Years	S. pneumoniae * N. meningiditis	Penicillin for suspected Gram positive (repeat lumbar puncture in 48 hrs)
Adult > 50 Years	S. pneumoniae* Staphylococci Streptococci Gram negative organisms	Penicillin for suspected Gram + PRSP ** for suspected Staph. Gentamicin i.m. and i.t. *** for suspected gram negative organism

* Most probable organism
** PRSP = Penicillinase-resistant semisynthetic penicillin (methicillin, Nafcillin)
*** i.t. = intrathecally

During the second month of life, the infant is still slightly at risk from the enteric bacilli, *Listeria, S. aureus,* group D streptococci and members of the genus *Acinetobacter.*[14] But, in addition, *H. influenzae,* meningococci and pneumococci are also possible pathogens. The agents recommended for initial therapy are therefore ampicillin and gentamicin, but the continuation of this therapy must be based on the results of bacteriologic tests and repeat LP when indicated.

How many lumbar punctures should be performed for proper management of neonatal meningitis? This question as yet has no completely satisfactory answer.[17] However, when meningitis is suspected in the neonate, and the initial tap shows normal CSF in the presence of bacteremia,

a second lumbar puncture must seriously be considered. Several cases of meningitis have been reported in which the CSF obtained on the initial lumbar puncture was essentially normal. A second LP sometimes performed only a few hours later, revealed purulent fluid.[18] Some experts recommend repeat lumbar puncture 24-48 hours after the initiation of therapy in neonatal meningitis for purposes of monitoring bacteriologic response.[14]

Hemophilus influenzae is the predominant pathogen in children ages one to five although the pneumococci and meningococci are also common causes of childhood meningitis. After about age five, *H. influenzae* becomes less important as a pathogen. Meningitis due to *Hemophilus* occurs almost exclusively in patients under six years of age.[2,6,7] Therefore, in the older patient with *Hemophilus influenzae* meningitis, one should suspect a parameningeal focus of infection or immunoglobulin deficiency. The mortality in *H. influenzae* meningitis is mainly in infants less than one year old.

Because of its safety in antibacterial activity against *D. pneumoniae* and *N. meningiditis,* as well as *H. influenzae* type b, ampicillin has been recommended as the therapeutic agent for the treatment of acute bacterial meningitis in infancy and childhood.[19] However, recently ampicillin resistant *H. influenzae* type b have been isolated from patients with meningitis, septicemia, otitis media, and from clinically normal carriers.[20,21] In a study from the Center for Disease Control selected clinical isolates of *H. influenzae* were tested for their susceptibility to antibiotics. Eleven of 40 strains tested were resistant to ampicillin, but all of the strains tested were susceptible to chloramphenicol.[22] Chloramphenicol is, therefore, an alternative agent in the treatment of *H. influenzae* meningitis; and in areas where ampicillin resistant strains of *H. influenzae* type b are prevalent, it is the drug of first choice.

High dosage penicillin should be used for initial therapy in adult meningitis when gram-positive organisms are suspected, in the absence of a history of central nervous system trauma or invasion. Staphylococcal infections are frequent after invasive neurodiagnostic procedures and a penicillinase resistant semisynthethic penicillin should be considered in that type of clinical setting. Gentamicin intramuscularly and intrathecally is currently the drug of choice for suspected gram-negative meningitis.[16]

Table 3 shows the antibiotic therapy of choice according to the etiologic agent. Initial antimicrobial treatment of bacterial meningitis should be by the intravenous route and therapy should be continued for a minimum of 10 days, except in meningococcal meningitis. High dose penicillin is the treatment of choice for meningococcal meningitis, and chloramphenicol is an effective alternative drug for patients who cannot tolerate penicillin.

While prophylactic administration of antibiotics to contacts of patients with either *H. influenzae* or pneumococcal meningitis is not indicated, close contacts of patients with meningococcal meningitis have a greater probability of developing meningococcal disease than the population as a whole, but the actual increase in risk is unknown.[5] Penicillin, unfortunately, is ineffective in eradicating meningococci from carriers; minocycline and rifampin appear effective in reducing the carrier rate, being active against both sulfadiazine resistant and susceptible strains.[45,46] Meningococcal polysaccharide vaccine may also be useful in the prevention of meningococcal disease. Polysaccharide from group C and group A organisms can induce the formation of serum antibodies in human beings, and large scale trials have shown that group C meningococcal polysaccharide vaccine is effective in reducing the incidence of group C meningococcal disease.[47] Cephalothin is not adequate in the treatment of bacterial meningitis because of inadequate levels in the cerebrospinal fluid.[48]

The drug of choice for pneumococcal meningitis is penicillin G in high doses; chloramphenicol is an alternative agent in patients allergic to penicillin. The drugs of choice for H. influenzae meningitis are ampicillin and chloramphenicol. Antibiotics of the penicillin class are readily passed from blood to CSF in the presence of inflammation, but only poorly in its absence. Chloramphenicol on the other hand, passes into the CSF well under all conditions.[49,55] Comparisons of patients treated for *H. influenzae* meningitis with either ampicillin or chloramphenicol have shown that the only significant differences in the courses of two groups of patients are a prolonged duration of fever and a higher frequency of relapses in the ampicillin treated patients.[50] Ampicillin is shown as the drug of first choice in Table 3, in spite of scattered reports of drug failure with this antibiotic,[5] because of the very small and unpredictable risk of irreversible agranulocytosis associated with chloramphenicol therapy.

Staphylococcal meningitis should be treated with penicillin G if the organism is sensitive,[56,57,61] but since a majority of both community-acquired and hospital-acquired staphylococci may produce penicillinase[61] a penicillinase-resistant semisynthetic penicillin (such as methicillin, nafcillin, or oxicillin) should be used when staphylococcal meningitis is suspected but the sensitivity results are unknown.[56] Although cephalothin has been used successfully in the treatment of severe staphylococcal infections,[61] a report of non-staphylococcal meningitis developing during cephalothin therapy[48] is disturbing. Cephalosporins should not be used to treat infections with methicillin-resistant staphylococci.[62] Vancomycin has been proven effective in the treatment of staphylococcal meningitis,[58] and may be the best antimicrobial agent for treating infections due to *Staph. aureus* strains resistant to methicillin.[59] Vancomycin is bactericidal for a variety of organisms, and is useful in Staphylococcal meningitis not responsive to other antimicrobial agents.[60] Therapy with IV administration of Vancomycin 40 mg/kg/day up to a maximum of 2 gm per day has been recommended.[57,60] Intrathecal therapy, 20 mg/day should be added only if the CSF is not sterilized after 48 hours of IV treatment.[60]

The choice of antibiotic therapy in patients with suspected gram-negative meningitis should be based on the organisms' sensitivity. However, when sensitivities are unknown and gram negative bacilli are present on examination of the CSF or initial culture reports, gentamicin IV or IM (5 mg/kg/day) with an intrathecal injection of 4 mg provides the most reliable antibacterial effect in CSF with a relatively low risk of toxicity.[16] Intrathecal gentamicin is required because of inadequate CSF penetration and must be given approximately every 12-18 hours to maintain adequate CSF levels.[16] Chloramphenicol may also be used, but its antibacterial spectrum does not include many *Proteus* and most *Pseudomonas* strains. Carbenicillin is also suitable, but is usually ineffective against the *Klebsiella-Enterobacter-Serratia* group. Either may be combined with gentamicin, but since carbenicillin may be synergistic with gentamicin, if chemical inactivation by direct mixing is avoided,[63] the combined use of carbenicillin and gentamicin is favored. Effectiveness of therapy should be determined by sensitivity testing and confirmed by subsequent cerebrospinal fluid cultures. The combination of gentamicin and carbenicillin has been recommended for patients with various types of severe *Pseudomonas* infections, particularly patients who

Table 3

TREATMENT OF BACTERIAL MENINGITIS IN ADULTS BY ETIOLOGICAL AGENT

ORGANISM	ANTIBIOTIC				DURATION (days)
	1st Choice	Dose	Alternative	Dose (i.v.)	(avg. est.)
Meningococcus	Penicillin G	10-15 Mu qd #	Chloramphenicol	4-6 gm qd	7
Pneumococcus	Penicillin G	10-15 mu qd	Chloramphenicol	4-6 gm qd	12
Haemophilus	Ampicillin *	6-12 gm qd	Chloramphenicol	4 gm qd	12
Listeria	Penicillin G	10-15 Mu qd	Tetracycline	1 gm qd	14+
Staphylococcus	Penicillin G *	10-15 Mu qd			14+
	PRSP**	6-12 gm qd	Vancomycin	40 mg/kg/day	
Pseudomonas	Gentamicin*** and Carbenicillin	5 mg/kg qd 30-40 gm qd	Polymyxin B i.t.	5 mg in 5 ml saline (adult) i.m. 2 mg/kg qd	14+
Other Gram Negatives: E. coli	Gentamicin****	5 mg/kg qd	Chloramphenicol Carbenicillin	6-8 gm qd 30-40 gm qd	14+

* if sensitivity demonstrated

** PSRP = Penicillinase-resistant semisynthetic penicillin, such as methicillin

*** intrathecal gentamicin 4 mg in 4 ml saline should be added

**** Gentamicin i.v. or i.m. with an intrathecal injection of 4 mg provides widest and most reliable antibacterial effect in CSF, with relatively low risk of toxicity.

\# Mu = million units

are neutropenic.[65,66] Gentamicin as noted above should be given intrathecally in patients with *Pseudomonas* meningitis.[67] The use of polymyxin B for gram-negative meningitis has usually been limited to *Pseudomonas* infections because of the clear necessity for intrathecal administration.[19,64,68] Although experience with polymyxin B for *Pseudomonas* meningitis has been favorable and is more extensive than that with gentamicin, the latter appears to be as effective and less toxic.[19]

Finally, it should be noted that single agent therapy of acute bacterial meningitis is preferable in every instance except those where synergism has been demonstrated (as with carbenicillin and gentamicin) and single agent therapy is ineffective. Antagonism between penicillin and chloramphenicol has been reported in experimental pneumococcal meningitis,[51] and clinical studies such as the one by Lepper and Dowling[52] have demonstrated that there is a significantly higher mortality rate in patients with pneumococcal meningitis treated with both penicillin and chlortetracycline than in a comparable group of patients treated with penicillin alone. Evidence has been presented for antibiotic antagonism in bacterial meningitis due to a variety of etiologic agents. A higher case fatality rate and increased rate of neurological residua was observed in patients treated with multiple drugs in a prospective study conducted by Mathies and others.[53] Bacterial meningitis, therefore, appears to be a situation in which a combination of bacteriostatic and bactericidal agents is undesirable.

Table 1 shows the lowest mortality rate in cases of meningococcal meningitis, and the highest mortality rate in cases caused by the pneumococcus and other (unusual) pathogens. Increased mortality has been associated with a delay in diagnosis or improper diagnosis, bacteremia, extremes of age, and certain underlying or complicating diseases such as subacute bacterial endocarditis and pneumonia.[7] Increased mortality has also been associated with about 25% of patients in each of the major etiologic groups who experienced a rapid clinical course (rapid onset of headache, confusion, lethargy, and loss of consciousness), as opposed to a second type of clinical presentation with more slowly progressive symptoms over one to seven days.[2] A poor cellular response in the cerebrospinal fluid (CSF) and blood, particularly in infants and the elderly, is associated with a poor prognosis.[13] Despite the availability of effective antibiotic therapy, bacterial meningitis remains a dreaded and debilitating disease.

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In Kentucky as of July 1976, five patients with meningitis caused by ampicillin resistant *Hemophilus influenzae* have been identified. The patients were from Lexington (1), Louisville (2) and Covington (2). Since the frequency of ampicillin resistant *H. influenzae* organisms appears to be increasing in Kentucky, chloramphenicol should be the initial therapy of patients with documented or suspected meningitis due to *H. influenzae*. In the case of initial therapy for meningitis of unknown etiology, the American Academy of Pediatrics Committee on Infectious Diseases, recommends simultaneous administration of penicillin or ampicillin **and** chloramphenicol. The drugs should be administered in full therapeutic doses by the intravenous route: ampicillin 150 to 400 mg/kg/day; chloramphenicol 100 mg/kg/day (*Pediatrics* 55:145, 1975).

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EDITORIAL

A Woods Hole of Mid America

NESTLED on the southwest extremity of Cape Cod, Massachusetts, is an unusual biological research facility, The Woods Hole Marine Biological Laboratory. Founded in the late 19th century, this complex affords those interested in biological research the opportunity of combining work with vacation in a most exciting environment. Investigators in our state of Kentucky have spent productive and enjoyable summer months at Woods Hole.

The question might be asked, and rightly so, "What has the Woods Hole Marine Biological Laboratory to do with Kentucky and, more particularly, with medicine in Kentucky?" There is in Western Kentucky an area with all the potential of becoming a first rate biological research laboratory —the Land Between the Lakes. In the May 18, 1976, issue of the *Louisville Times,* there is an article by Linda Raymond on this remarkable area which is located between Lake Barkley and Kentucky Lake. While in great part designed for recreation, the Land Between the Lakes does at this time afford educational opportunities, primarily environmental and historical. It could also be a paradise for the research biologists.

In the original proposal by the Tennessee Valley Authority for the creation of a between the lakes national recreation area, it was pointed out that the area is within 500 miles of 70 million people. A brief survey also indicates that perhaps a dozen major universities, some with medical colleges, and many more smaller colleges are within 250 miles of this lake area. One might anticipate that the biologists of these institutions would strongly support the creation of a research station at the Land Between the Lakes. Initial development might be on a very modest basis—as was true with the Woods Hole Marine Biological Laboratories—and could consist of a few laboratory buildings and housing facilities.

The value of such a biological research laboratory is substantial. The knowledge spinoff could be of benefit not only to the biologists and hence to some extent medicine, it would also be of benefit to the ecologists and environmentalists. In time the research area could become a center for scientific meetings, including medical meetings.

Perhaps the time is appropriate for serious consideration of such a research laboratory at the Land Between the Lakes.

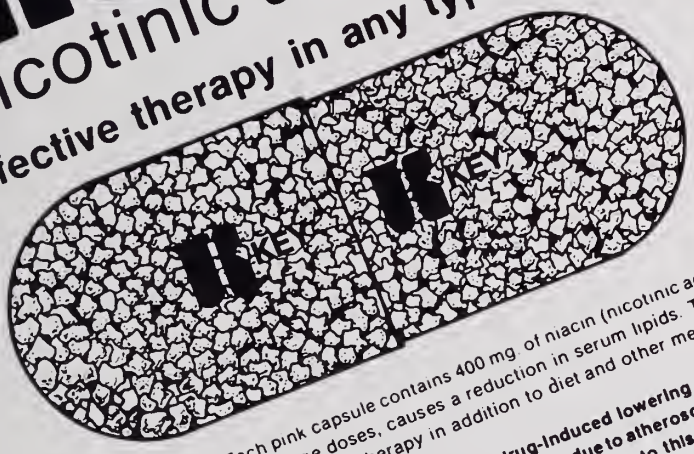
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"UNLESS YOU'RE SERVING TIME there's never enough of it."

The above quote is by Malcolm S. Forbes, Editor-in-Chief of FORBES business magazine.

During these times we are all busy, mostly with business, but there are social pressures also. Please take time to consider your disability insurance program. Loss of time is loss of income.

We'll be at the Annual Meeting and perhaps you should try to take time to see us.

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1976 Annual Meeting Section

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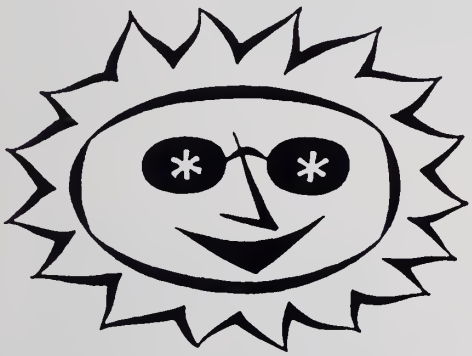
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PRESIDENT-ELECT

Paul J. Parks, M.D.

Bowling Green

The installation of Paul J. Parks, M.D., as President of the Kentucky Medical Association will take place at the President's Luncheon to be held Wednesday, September 29.

Doctor Parks, an internist, is a 1948 graduate of the University of Louisville School of Medicine. He previously practiced in Richmond, Kentucky, and Tallahassee, Florida, for several years before going to Bowling Green in 1958.

Continually active in the affairs of organized medicine, Doctor Parks is a former president of both the Madison and Warren county medical societies. He has served on various hospital committees at the county level, including four years with utilization review, and is a past president of the Greenview Hospital staff.

His past experience in Associational work well qualifies him for the duties ahead as KMA President. Doctor Parks was KMA Trustee from the Sixth District from 1969 to 1975. During that time he was appointed Vice-Chairman of the Board in 1973-1974 and Chairman in 1974-1975. This past year, Doctor Parks served as Chairman of the Committee on National Legislative Activities and was a member of many other committees including Scientific Program, State Legislative Activities, and Ad Hoc on Professional Liability Insurance.

A Trustee of Georgetown College for over ten years, Doctor Parks has also given much time to community involvement and is active in the First Baptist Church in Bowling Green.

VICE-PRESIDENT
John M. Baird, M.D., Danville

Doctor Baird, a family physician, is a 1953 graduate of the University of Louisville School of Medicine. He serves as Vice-President of the Ephraim McDowell Memorial Hospital in Danville and is Medical Director of the McDowell Home Health Agency and the Boyle County Family Planning Clinic.

Active in civic affairs in his community, Doctor Baird has held offices in the Kiwanis Club and the Junior Chamber of Commerce. He is a Trustee of Oneida Institute and is active in the Lexington Avenue Baptist Church.

A member of both the Kentucky Chapter and American Academy of Family Physicians, Doctor Baird has served on numerous committees of KMA. He was chairman of the Scientific Exhibits Committee in 1974-1975 and currently is a member of the Committee on Medicare and Other Medical Programs.

SPEAKER OF THE HOUSE
Carl Cooper, Jr., M.D., Bedford

Doctor Cooper, a family practitioner, has served as Speaker of the House since 1974. Other KMA offices he has held include House Vice-Speaker, Vice-President, and Alternate Delegate to AMA. He currently serves as Chairman of the Committee on State Legislative Activities and in this capacity worked diligently this year with activities of the Kentucky General Assembly. A 1952 graduate of the University of Louisville School of Medicine, Doctor Cooper is the past Chairman of the KEMPAC Board of Directors. A Fellow of the AAFP, he received the KAFP "Citizen Doctor of the Year" Award in 1970.



SECRETARY-TREASURER
S. Randolph Scheen, M.D., Louisville

Having served eight years as KMA Secretary, Doctor Scheen was elected to the newly created post of Secretary-Treasurer in 1975. A Louisville dermatologist, and Assistant Clinical Professor at the University of Louisville and University of Kentucky medical schools, Doctor Scheen is a 1953 graduate of the U of L and earned his M.Sc. degree in 1960 from the University of Minnesota. He is a member of the American Academy of Dermatology and serves on the KMA Judicial Council. Doctor Scheen is a regular participant on several local television and radio programs, answering questions from the public on dermatology.



The Board of Trustees at their meeting on August 12 appointed a Vice-Speaker to serve during the 1976 Annual Meeting. The House of Delegates will elect a Vice-Speaker on Wednesday, September 29, during the Annual Meeting to serve two years of the three-year Vice-Speaker term held by Richard B. McElvein, M.D., who resigned in May when he moved to Birmingham, Alabama.

AMA Delegates

David B. Stevens, M.D., Lexington



An orthopaedic surgeon, Doctor Stevens has served as either an Alternate Delegate or Delegate to the AMA since 1965. He has been extremely active in the field of cults, having served on the AMA Committee on Quackery and the KMA Cults Committee. A 1955 graduate of Northwestern University Medical School, he is Assistant Clinical Professor of Surgery at the University of Kentucky College of Medicine. Doctor Stevens is a Past President of the Fayette County Medical Society and the Kentucky Orthopaedic Society. He belongs to the American Academy of Orthopaedic Surgeons and the Association of Bone and Joint Surgeons.

Fred C. Rainey, M.D., Elizabethtown



Elected as AMA Delegate in 1974, Doctor Rainey is a Past President of KMA and serves on numerous committees of the Association, included National and State Legislative Activities, Technical Advisory on Physician Services, and the Awards Committee, of which he is the Chairman. A 1955 graduate of the University of Tennessee College of Medicine, Doctor Rainey is a family practitioner and belongs to the KAFP and AAFP. A past Chairman of the KEMPAC Board of Directors, Doctor Rainey has held a number of offices in the Jaycee organization, including the Vice-Presidency of the U.S. Jaycees.

J. Thomas Giannini, M.D., Louisville



Doctor Giannini is the Senior Delegate to AMA from Kentucky, having served since 1963 as a Delegate or Alternate Delegate. He is a former Chairman of the KMA Scientific Exhibits Committee and served as a delegate from the Jefferson County Medical Society. Doctor Giannini graduated from the University of Louisville School of Medicine in 1938 and is a former Head of the Plastic Surgery Department at U of L. A Fellow of the American Society of Plastic and Reconstructive Surgery, he is a former Secretary-Treasurer of the Kentucky Society of Plastic and Reconstructive Surgery.

Journal Editors

EDITOR
Walter I. Hume, Jr., M.D., Louisville



Now in his sixth year as Editor of *The Journal*, Doctor Hume previously served as its Assistant Editor from 1967-1970. A past President of the Jefferson County Medical Society, he now serves as Chairman of the KMA Ad Hoc Committee on Health Care Costs. Doctor Hume, a 1949 graduate of Harvard Medical School, is Associate Clinical Professor of Surgery at the University of Louisville School of Medicine. He now serves as a member of the Board of Directors of several professional organizations, including the Falls Region Health Council and Kentucky Physicians Mutual, Inc.

ASSOCIATE EDITOR
Henry B. Asman, M.D., Louisville



Doctor Asman, who has been Associate Editor of *The Journal* since 1970, has served KMA in many capacities. In addition to his membership on countless KMA committees, he was KMA President in 1968-1969 and has also served as Vice-President (1961) and Secretary (1963-1967) of the Association. A 1936 graduate of the University of Louisville School of Medicine, Doctor Asman is a Fellow of the American College of Surgeons and a past President of the Ohio Valley Proctologic Society. Currently, he is Director of Medical Services for Kentucky Blue Cross and Blue Shield. Doctor Asman is the 1975 recipient of the KMA Distinguished Service Award.

ASSISTANT EDITORS

A. Evan Overstreet, M.D., Louisville

A 1955 graduate of the University of Louisville School of Medicine, Doctor Overstreet practices internal medicine in Louisville. He is a member of the American Society of Internal Medicine, American College of Physicians and the Transylvania Medical Society. Doctor Overstreet was appointed Assistant Editor of *The Journal* in 1972.

John S. Llewellyn, M.D., Louisville

Serving his second year as Assistant Editor, Doctor Llewellyn was a KMA Trustee from the Fifth District in 1969-1972. An internist, also, Doctor Llewellyn graduated from Loyola University in 1940 and belongs to the American Society of Internal Medicine. He is a Fellow of the American College of Physicians.

G. Randolph Schrodt, M.D., Louisville

Doctor Schrodt, Professor and Chairman of the Department of Pathology and a 1954 graduate of the University of Louisville School of Medicine, was appointed Assistant Editor in 1974. He holds membership in the American Association of Pathologists and Bacteriologists and the American Society of Pathologists.

SCIENTIFIC EDITOR

Paul C. Grider, Jr., M.D., Louisville

Appointed as Scientific Editor of *The Journal* in 1974, Doctor Grider has practiced internal medicine in Louisville since 1964. A 1958 graduate of the University of Louisville School of Medicine, he currently is serving as President of the Medical Staff at Methodist Evangelical Hospital.

New Trustees

Cecil L. Grumbles, M.D., Louisville

Doctor Grumbles now serves as KMA Trustee from the Fifth District. A 1954 graduate of the University of Louisville, he currently is President-Elect of the Staff at Norton-Children's Hospital. He is Chairman-Elect of the Section on Gynecology of the Southern Medical Association and is a member of the Southern Gynecological and Obstetrical Society and the American College of Obstetrics and Gynecology.

Earl P. Oliver, M.D., Scottsville

Serving as Sixth District Trustee, Doctor Oliver graduated from the University of Louisville in 1943. A past President of the Allen County Medical Society, Doctor Oliver is a former Chairman of the KMA Committee on Aging and served as Chairman of the Kentucky Commission on Aging from 1967 to 1969. He is a Fellow of the American Academy of Family Physicians and is a charter member of the KAFP.

Dwight L. Blackburn, M.D., Berea

Doctor Blackburn, now serving as Trustee from the Eleventh District, is a 1953 graduate of the University of Louisville School of Medicine. Having twice served as president of the Madison County Medical Society, Doctor Blackburn, a family practitioner, has been very active in numerous civic activities. He was recently named "Distinguished Alumnus" of Berea College and in 1973 was the Chamber of Commerce "Man of the Year."

Nominating Committee To Meet Monday, September 27

The KMA Nominating Committee will hold an open meeting at the close of the first session of the House of Delegates, Monday, September 27, in the Jeffersonian Room at Ramada Inn.

Any KMA member may confer with the Committee during this meeting. Final recommendations of the Committee will be reported at the end of the first scientific session, Tuesday morning, September 28.

Nominations may be made from the floor during the second meeting of the House of Delegates, Wednesday evening, September 29. The House will vote on the nominees at the close of this session.

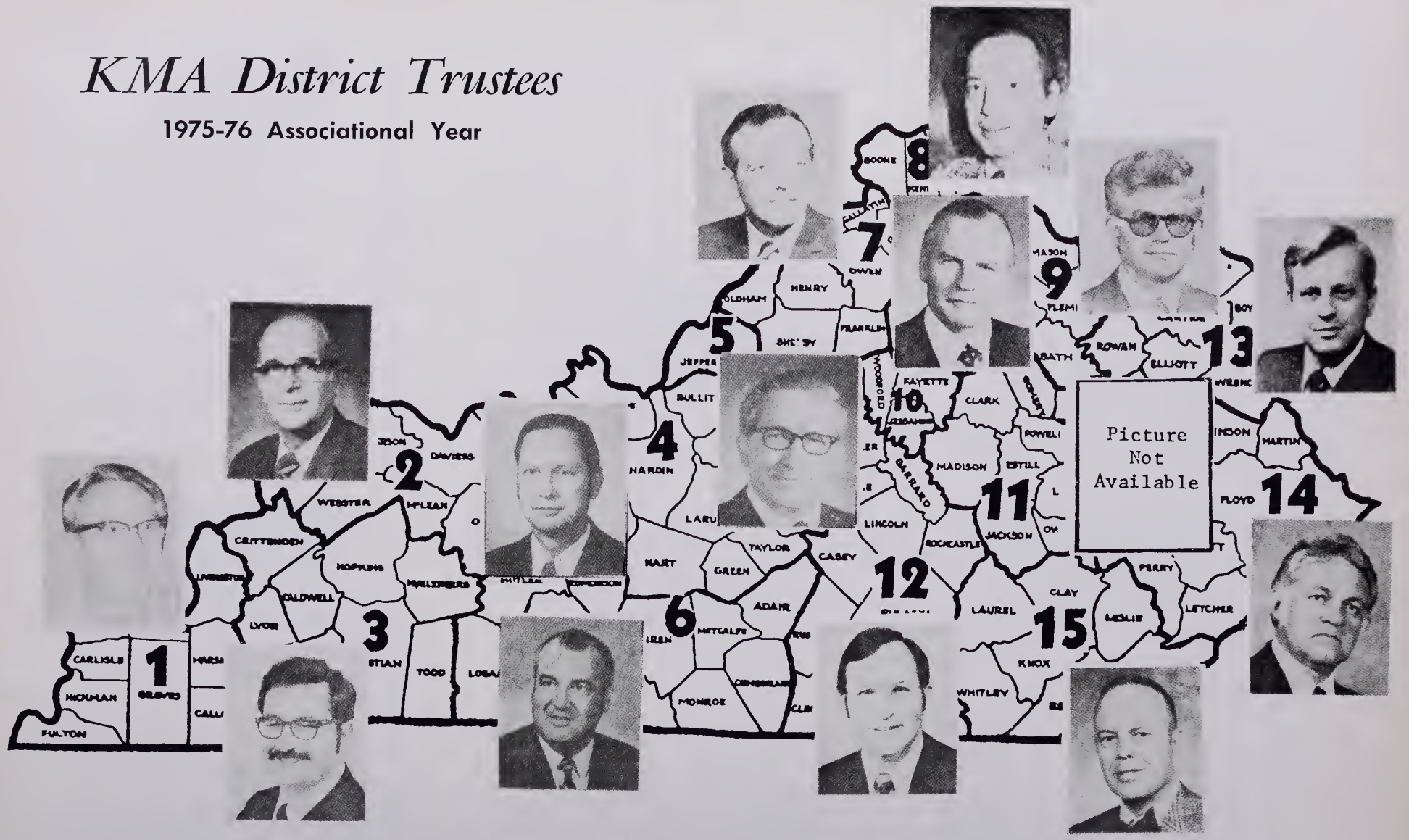
Members of the Committee are as follows: Leslie W. Blakey, M.D., Lexington, Chairman; Max P. Jones, M.D., Pikeville; William E. Pearson, M.D., Owensboro; Lewis E. Wesley, M.D., Liberty; and J. Sankey Williams, M.D., Nicholasville.

MAKE YOUR RESERVATIONS NOW

It is important that you begin making your room reservations as soon as possible for the KMA Annual Meeting, September 28-30. The Ramada Inn at I-64 and Hurstbourne Lane will be the Headquarters Hotel, however, there are several other accommodations within easy reach of Ramada Inn and the Bluegrass Convention Center. In making your reservations, remember the first House of Delegates meeting will be Monday, September 27.

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A Message Center will once again be provided by the South Central Bell Telephone Company during the 1976 KMA Annual Meeting. The phone number where you may be reached in case of emergencies or for routine messages is **(502) 491-1929.**

Located in the center of the Technical Exhibit Hall (Booth No. 51) at the Bluegrass Convention Center, the Message Center will be staffed at all times during the meeting. Due to the arrangements of facilities for the meeting, paging of individuals will not be possible.

Only emergency calls will be posted on blackboards in the entrance lobby of the Convention Center and in the Scientific Assembly Hall. All other messages will be kept on file at the Message Center until you call for them; so please check there often for any messages. Other physicians can be located by leaving a message at the Message Center for them.

The phone number at the Headquarters Hotel, Ramada Inn, is (502) 491-4830. You may be reached during the meetings of the House of Delegates by calling that number. Your name will be posted on a blackboard in the front of the room when you receive a call.

You are urged to make use of the Message Center. Be sure to leave these numbers at your home, office, and hospital.

Reference Committee Activity

Speaker Carl Cooper, Jr., M.D., Bedford, will assign all officers' and committees' reports and resolutions to one of six Reference Committees at the first meeting of the KMA House of Delegates at 9:00 a.m., Monday, September 27. **Briefing sessions** for Reference Committee Chairmen will be held at **12:30 p.m., Monday,** in the **Majestic Room, Bluegrass Convention Center.** Any KMA member wishing to testify on any resolution or report is urged to be present for the **Reference Committee meetings** which will be held at **2 p.m., Monday September 27, at Bluegrass Convention Center.** These open sessions will last one hour in order for all who wish to speak to be heard. Following the open hearings, the Committees will go into executive sessions to study the reports, review the testimony, and write their reports to the House.

The Committees' recommendations will be presented at the final session of the House, Wednesday night, September 29, in the Bluegrass Convention Center. Listed below are the Reference Committees as appointed by Doctor Cooper to serve during the 1976 session.

1976 Reference Committee Appointments

REFERENCE COMMITTEE NO. 1

Island Queen and Idlewild Rooms

Don E. Cloys, M.D., Richmond, Chairman
Kenneth M. Eblen, M.D., Henderson
Arthur H. Keeney, M.D., Louisville
John E. Trevey, M.D., Lexington

REFERENCE COMMITTEE NO. 2

Cincinnati Room

Harold D. Haller, M.D., Louisville, Chairman
Colby N. Cowherd, M.D., Lexington
Wally O. Montgomery, M.D., Paducah
Don R. Stephens, M.D., Cynthiana
Emmett W. Wood, M.D., Bardstown

REFERENCE COMMITTEE NO. 3

Eclipse Room

Harvey A. Page, M.D., Pikeville, Chairman
Gary D. Givens, M.D., Central City
Richard K. Jelsma, M.D., Louisville
Robert L. McKenney, M.D., Falmouth
John M. Stoeckinger, M.D., Lexington

REFERENCE COMMITTEE NO. 4

Grand Republic Room

James P. Moss, M.D., Louisville, Chairman
Richard D. Floyd, M.D., Lexington
William E. Pearson, M.D., Owensboro
Fred A. Stine, M.D., Covington
N. H. Talley, M.D., Princeton

REFERENCE COMMITTEE NO. 5

Delta Queen Room

Robert E. Smith, M.D., Covington, Chairman
Donald C. Barton, M.D., Corbin
Peter C. Campbell, M.D., Louisville
C. Douglas LeNeave, M.D., Mayfield
Forest F. Shely, M.D., Campbellsville

REFERENCE COMMITTEE NO. 6

Natchez Room

C. Nicholas Kavanaugh, M.D., Lexington, Chairman
Wyatt Norvell, M.D., New Castle
Cecil D. Martin, M.D., Carrollton
C. Ray Potts, M.D., Louisville
L. Martin Wilson, M.D., Bowling Green

OFFICIAL CALL

KMA Annual Meeting

To the officers and members of the component county medical societies of the Kentucky Medical Association.

Meeting Place

The Annual Meeting of KMA will convene on Tuesday, Wednesday, and Thursday, September 28, 29, and 30, at the Bluegrass Convention Center, Louisville. The first general session will be called to order at 8:50 a.m., Tuesday.

The House of Delegates

The first regular session of the House of Delegates will convene at 9 a.m., Monday, September 27, in the Jeffersonian Room of Ramada Inn. The second regular business session will begin at 7 p.m., Wednesday, September 29, in the Banquet Area of the Bluegrass Convention Center.

Registration

The registration desk will open outside the Jeffersonian Room of Ramada Inn at 8 a.m., Monday, September 27 and at 6 p.m., Wednesday, September 29 in Bluegrass Convention Center. It will be open outside the Technical Exhibit Hall at Bluegrass Convention Center from 8 a.m. to 5 p.m., Tuesday, Wednesday, and Thursday, September 28-30.

House to Elect New Officers During Annual Meeting

KMA Officers for the 1976-77 Associational year will be elected by the House of Delegates at the close of its final session, Wednesday evening, September 29. Officers to be elected from the state at large are as follows:

	Term
President-Elect	**One Year**
Vice-President	**One Year**
Vice-Speaker, House of Delegates	**Three Years**
Delegate to AMA	**Two Years**
***(J. Thomas Giannini, M.D.)**	
Alternate Delegates	**Two Years**
***(Charles G. Bryant, M.D.)**	
****(Thomas L. Heavern, Jr., M.D.)**	

***Incumbent not seeking re-election**
****Seeking replacement**

The AMA Delegate and Alternate are to be elected for two-year terms from January 1, 1977, to December 31, 1978. The Alternate elected to replace Doctor Heavern will serve until December 31, 1977.

ELECTIONS

Election of Trustees and Alternate Trustees

The House of Delegates will elect five District Trustees and five Alternate Trustees at its second regular session, Wednesday, September 29. Nominations will be made by the Delegates from the electing Districts at a meeting following the first session of the House on Monday, September 27.

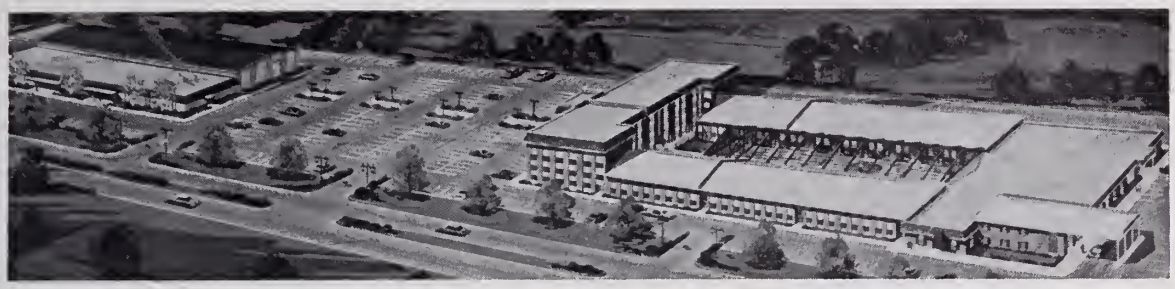
The Nominating Committee will report at the close of the first scientific session on Tuesday, September 28. Further nominations may be made from the floor at the final session of the House on Wednesday evening, September 29. All nominations are considered and acted upon by the Delegates at this final session.

Districts electing Trustees for three-year terms are: SECOND DISTRICT (incumbent, Charles C. Kissinger, M.D., Henderson); SEVENTH DISTRICT (incumbent, John P. Stewart, M.D., Frankfort); NINTH DISTRICT (incumbent, James L. Ferrell, M.D., Paris); TENTH DISTRICT (incumbent, James B. Holloway, Jr., M.D., Lexington); and the THIRTEENTH DISTRICT (incumbent, J. Wesley Johnson, M.D., Ashland).

Districts electing Alternate Trustees are the same as those electing Trustees. Incumbents are Kenneth M. Eblen, M.D., Benton (2nd); William H. Keller, M.D., Frankfort (7th); Don R. Stephens, M.D., Cynthiana (9th); Richard F. Hench, M.D., Lexington (10th); and A. B. Richards, M.D., Louisa (13th).

Trustees and Alternate Trustees of the 7th, 9th, and 10th Districts are eligible for re-election, while both the Trustees and the Alternate Trustees from the 2nd District and the 13th District have served two full terms and are not eligible for re-election.

Special Features — 1976 Annual Meeting



Bluegrass Convention Center **Ramada Inn**

THE SCIENTIFIC PROGRAM, September 28, 29, and 30, will feature many timely medical topics and nationally recognized speakers. All general sessions will be held at the Bluegrass Convention Center, located at I-64 and Hurstbourne Lane in Louisville. Themes for these sessions include, "Emergency," "Breast Problems," and "Infectious Diseases." Informative presentations make the KMA Annual Meeting an outstanding vehicle for continuing education.

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THE HOUSE OF DELEGATES, top policy-making body of the Association, will hold two sessions during the Annual Meeting. The first House session will be held at 9 a.m., Monday, September 27, in the Jeffersonian Room at Ramada Inn. The House will hold its final session on Wednesday, September 29, at 7 p.m. in the Bluegrass Convention Center. New KMA officers will be elected at the final session.

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SEVENTEEN SPECIALTY GROUPS will be meeting during the Annual Meeting on the afternoons of September 28 and 30. Meetings will begin at 1:30 p.m. this year and will be held in the Bluegrass Convention Center, with the exception of the Kentucky Orthopaedic Society meeting which will be held in the Ramada Inn. No general sessions are scheduled for those afternoons and all KMA members are invited to attend any of the specialty group meetings.

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SCIENTIFIC AND TECHNICAL EXHIBITS will be on display at the Bluegrass Convention Center and will feature a variety of medical products, services, and techniques. Members and guests will have the opportunity to gain the latest information about recent advances in many medical fields. Thirty-minute intermissions are scheduled during each general and specialty group session.

THE PRESIDENT'S LUNCHEON, to be held Wednesday, September 29 at 12:00 noon, will feature J. Ed McConnell of Louisville as guest speaker. Mr. McConnell, formerly President of Kentucky Blue Cross and Blue Shield and Delta Dental, recently became Advisory Chairman of the Corporate Boards of that organization. Other highlights of the Luncheon, which will be held in the Banquet Area of the Bluegrass Convention Center, include presentation of KMA's top awards and installation of the 1976-1977 President of the Association, Paul J. Parks, M.D.

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ALUMNI REUNIONS for five-year classes of the University of Louisville School of Medicine are being planned. Information regarding these reunions may be obtained by contacting the Chairman of the specific year listed elsewhere in this *Journal* or may be picked up at the registration desk during the Annual Meeting.

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THE AUXILIARY TO KMA will hold its 54th Annual Convention, September 27, 28, and 29 at Ramada Inn. The program for this meeting is featured on the Auxiliary page in this issue.

REGISTRATION INFORMATION

A registration booth will be located at the entrance to the Technical Exhibit Hall of the Bluegrass Convention Center throughout the Annual Meeting. The booth will be open at 8 a.m., Tuesday, Wednesday, and Thursday, September 28-30.

Please register and wear your badge at all times while attending the meeting.

YOU ARE INVITED TO ATTEND

KEMPAC Reception—Dinner Seminar

Monday, September 27, 1976
6:00 p.m., EDT
Banquet Area
Bluegrass Convention Center
featuring



Richard M. Scammon, Ph.D., Director
Elections Research Center in Washington, D.C.

Make plans now to attend and hear this expert political analyst. Following Dr. Scammon's presentation, he will have a question and answer period.

Donald C. Barton, M.D., KEMPAC Board Chairman, urges you to get your tickets early for this Fourteenth KEMPAC Seminar. Tickets are $15 per person; checks should be made payable to KEMPAC. Send reservations to KEMPAC, 3532 Ephraim McDowell Drive, Louisville, Kentucky 40205. Or, you may purchase tickets from the KEMPAC Director in your area.

I plan to attend the KEMPAC Seminar.

Send me _____ tickets @ $15 per person.

_____
Name

_____
Address

MESSAGE CENTER
491-1929

You may be reached through this number at the Bluegrass Convention Center during the KMA Annual Meeting, September 28-30.

U.L. Plans Alumni Reunions During KMA Annual Meeting

Reunions are being planned for alumni from ten classes of the University of Louisville School of Medicine. The reunions are scheduled to be held during the KMA Annual Meeting, September 28-30.

Information regarding the reunions may be obtained through the chairmen of the five-year classes listed below or through the UL Alumni Office, (502) 588-5783.

In addition to the individual class reunions, there will be a Dean's Alumni Reception on Tuesday, September 28 from 5 to 7 p.m. at the Plainview Racquet and Swim Club, 10335 Timberwood Circle in Louisville. A Hospitality Suite for University of Louisville alumni will be open on Monday evening, all day Tuesday, and day and evening on Wednesday in Rooms 1181-1183 of Ramada Inn.

1926—K. Armand Fischer, M.D., 601 S. Floyd St., Louisville, 585-4376.

1931—William K. Keller, M.D., 4013 St. Ives Court, Louisville, 893-7800.

1936—Henry B. Asman, M.D., 4917 Marksfield Circle, Apt. 1, Louisville, 425-1361.

1941—Chairman not selected.

1946—*(December)* J. Herman Mahaffey, M.D., 201 Baptist East Doctors Bldg., Louisville, 896-0361 *(May)* Maj. Gen. Robert Bernstein M.D., Walter Reed Army Medical Center, Washington, D.C. 20012, (202) 576-3475.

1951—Homer B. Martin, M.D., 3438 Medical Arts Bldg., Louisville, 456-4300.

1956—William J. VonderHaar, M.D., 801 Barrett Avenue, Louisville. 589-6450.

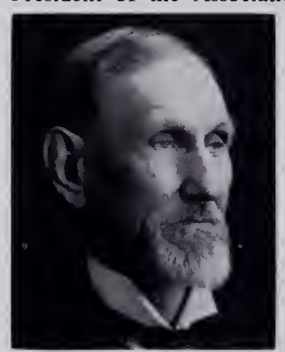
1961—Bob M. DeWeese, M.D., 604 Doctors Office Bldg., Louisville, 585-3107.

1966—Owen K. Hitt, M.D., 1211 Medical Arts Bldg., Louisville, 451-0300.

1971—Dwight E. Lindsay, M.D., 2120 Newburg Road, Suite 305, Louisville, 456-6200.

John A. Lewis, M.D., Honored At 1976 Annual Meeting

The 1976 KMA Annual Meeting will honor the 1896 President of the Association by officially entitling this year's meeting, "The John A. Lewis Memorial Meeting."



Doctor Lewis

Originating in 1935, either a past president of KMA or some distinguished physician that has made a contribution to Kentucky medicine is honored during the Annual Meeting.

Eugene H. Conner, M.D., Louisville, KMA Historian, has written a biography of Doctor Lewis which will appear in the official Annual Meeting program booklet which is distributed during the meeting.

1976 Annual Meeting Program Summary

The Kentucky Medical Association

September 26, 27, 28, 29 and 30

Bluegrass Convention Center/Ramada Inn

Louisville

SUNDAY, SEPTEMBER 26

12:30 p.m. Luncheon Meeting, KMA Board of Trustees ..... Grand Republic Room, Convention Center

MONDAY, SEPTEMBER 27

9:00 a.m. First Meeting, KMA House of Delegates ..... Jeffersonian Room, Ramada Inn
12:30 p.m. Luncheon, Reference Committee Chairmen ..... Majestic Room, Convention Center
2:00 p.m. Reference Committee Meetings ..... Island Queen-Idlewild Rooms, Cincinnati Room, Eclipse Room, Grand Republic Room, Delta Queen Room, Natchez Room, Convention Center
6:00 p.m. KEMPAC Reception, Banquet and Seminar ..... Banquet Area, Convention Center

TUESDAY, SEPTEMBER 28

8:00 a.m. Registration ..... Lobby, Convention Center
8:50 a.m. Opening Ceremonies ..... Scientific Assembly Hall, Convention Center
9:00 a.m. First Scientific Session ..... Scientific Assembly Hall, Convention Center
12:00 noon Luncheon Meeting, Executive Committee and Reference Committee Chairmen ... Mark Twain Room, Ramada Inn
1:30 p.m. Specialty Group Sessions, Convention Center (Nine Specialty Group sessions will be held simultaneously at this time. Their programs begin on page 418.
5:30 p.m. Reception honoring Paul J. Parks, M.D. and Mrs. R. Parnell Rollings ..... Poolside, Ramada Inn

WEDNESDAY, SEPTEMBER 29

9:00 a.m. Second Scientific Session ..... Scientific Assembly Hall, Convention Center
12:00 noon President's Luncheon ..... Banquet Area, Convention Center
2:00 p.m. Third Scientific Session ..... Scientific Assembly Hall, Convention Center
4:00 p.m. Board of Trustees Meeting and Dinner (6 p.m.) ..... Grand Republic Room, Convention Center
7:00 p.m. Second Meeting, KMA House of Delegates ..... Banquet Area, Convention Center

THURSDAY, SEPTEMBER 30

9:00 a.m. Fourth Scientific Session ..... Scientific Assembly Hall, Convention Center
12:00 noon Luncheon Meeting, Board of Trustess ..... Jeffersonian Room, Ramada Inn
1:30 p.m. Specialty Group Sessions, Convention Center (Eight Specialty Groups will meet simultaneously at this time. Their programs begin on page 422.

A 30-minute intermission has been scheduled during each morning and afternoon Scientific Session for visiting Scientific and Technical Exhibits

(Full Scientific Program begins on next page)

The Kentucky Medical Association
SCIENTIFIC PROGRAM
John A. Lewis Memorial Meeting
Bluegrass Convention Center, Louisville

TUESDAY, SEPTEMBER 28

MORNING SESSION
General Session

David A. Hull, M.D., Lexington
KMA President, Presiding

Theme: "Emergency"

8:50 Opening Ceremonies

9:00 "The Heimlich Manuever—Scientific Background and Update"
Henry J. Heimlich, M.D., Cincinnati, Ohio

9:30 "Airway Resuscitation Devices"
Peter Chodoff, M.D., Baltimore, Md.

9:50 "Recognition of Disease States of the Oral—Paraoral Structures Requiring Early Management"
Norbert Burzynski, D.M.D., Louisville

10:10 Intermission to Visit Exhibits

10:40 "Emergency Care and Treatment of Trauma of the Cervical Spine"
J. William Fielding, New York, N.Y.

11:00 "American Trauma Society—Lessons Learned From Cancer and Coronaries"
Thomas S. Morse, M.D., Columbus, Ohio

11:20 "Aggressive Resuscitation of the Nearly-Drowned Patient"
Martin J. Nemiroff, M.D., Ann Arbor, Mich.

11:40 "Emergency System"
Ronald Lee Krome, M.D., Detroit, Mich.

AFTERNOON SESSION
Nine Specialty Group Meetings

(Nine specialty groups will have simultaneous scientific programs beginning at 1:30 p.m. No general sessions will be held at this time.)

Kentucky Society of Anesthesiologists

Natchez Room

1:30 "Shock Lung"
Peter Chodoff, M.D., Baltimore, Md.

2:30 Intermission to Visit Exhibits

3:00 "The Anesthetic Management for Patients Undergoing Craniotomy for Posterior Fossa Lesions"
Kunnathu P. Geevarghese, M.D., Louisville

3:30 "A New Benzodiazepine"
Mark Ravin, M.D., Lexington

HENRY J. HEIMLICH, M.D.
Cincinnati, Ohio



Director of Surgery and Physician-in-Chief of the Esophagus Center at Jewish Hospital. Originator of the Heimlich Maneuver and inventor of the Heimlich Chest Drainage Valve. Associate Clinical Professor of Surgery, University of Cincinnati College of Medicine. Past president, National Cancer Foundation and Founder and President, The Dysphagia Foundation. Devised the Heimlich Operation for replacement of the esophagus. Author of two books and more than 60 scientific papers and produced two motion pictures.

PETER CHODOFF, M.D.
Baltimore, Maryland

Anesthesiologist-in-Chief, Baltimore City Hospitals; Associate Professor of Anesthesia, Johns Hopkins University. M.D., 1951, Jefferson Medical College. Examiner, National Board for Respiratory Therapy. Associate Examiner, American Board of Anesthesiology. Fellow, American College of Anesthesia. Member, International Anesthesia Research Society, Society of Critical Care Medicine. Delegate, American Society of Anesthesiologists.



NORBERT J. BURZYNSKI, D.D.S.
Louisville, Kentucky



Professor and Chairman, Department of Oral Diagnosis/Oral Medicine, University of Louisville School of Medicine. D.D.S., 1960, St. Louis University School of Dentistry. Program Chairman, Oropharyngeal Cancer Symposium. Advisory Editorial Review Board, Journal of Dental Research. Member, American Academy of Oral Pathology, American Association for Cancer Education, American Academy of Oral Medicine, International Association for Dental Research.

JOSEPH W. FIELDING, M.D.
New York, New York



Clinical Professor of Orthopaedic Surgery, Columbia University College of Physicians and Surgeons. M.D., 1946, University of Toronto. Director, Orthopaedic Surgery, St. Luke's Hospital in New York. Associate Editor, Clinical Orthopaedics and Related Research. Past president, International Society for the Study of the Lumbar Spine, New York Clinical Society. Member, American Academy of Orthopaedic Society for Sports Medicine, SICOT (International Society of Orthopaedic Surgery and Traumatology).

THOMAS S. MORSE, M.D.
Columbus, Ohio



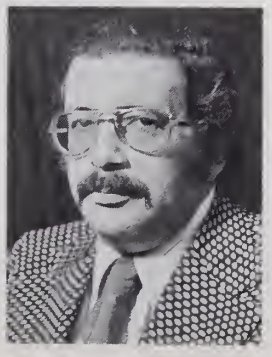
Associate Professor of Surgery (Pediatric), Ohio State University College of Medicine. M.D., 1953, Cornell University Medical College. President, American Trauma Society. Contributing Editor, Emergency Review. Member, American Academy of Pediatrics, American Association for the Surgery of Trauma, American College of Emergency Physicians, University Association for Emergency Medical Services.

MARTIN J. NEMIROFF, M.D.
Ann Arbor, Michigan



Assistant Professor of Internal Medicine, University of Michigan Medical School. M.D., 1966, University of Michigan Medical School. Director, Medical Chest Outpatient Clinic. Consultant, National Association of Underwater Instructors. Member, American Thoracic Society, Undersea Medical Society, National and Professional Associations of Diving Instructors. Author of numerous publications dealing with underwater emergencies.

RONALD L. KROME, M.D.
Detroit, Michigan



Associate Professor of Surgery, Wayne State University School of Medicine. M.D., 1961, University of Maryland. Director, Emergency Department of Detroit General Hospital. President-Elect, American College of Emergency Physicians. Treasurer, University Association for Emergency Medical Services. Fellow, American College of Surgeons. Member, Association of Academic Surgeons. Editor, Journal of the American College of Emergency Physicians.

Kentucky Chapter, American College of Chest Physicians

New Orleans-Island Queen-Idlewild Rooms

1:30 "Barotrauma to the Lung"
Martin J. Nemiroff, M.D., Ann Arbor, Mich.

2:30 Intermission to Visit Exhibits

3:00 Roundtable Discussion Groups
"Bronchoscopy"
"Coronary Artery Bypass Surgery"
"Exercise Testing and Exercise Rehabilitation"
"New Techniques in Radiology Related to Evaluation of Chest Disease"

Kentucky Chapter, American College of Emergency Physicians

Eclipse Room

1:30 "Status of Emergency Medicine—1976"
Ronald L. Krome, M.D., Detroit, Mich.

2:15 "Blood Gas Interpretations"
Donald Thomas, M.D., Louisville

2:45 "Evaluation of Joint Effusions"
Tony Seruda, M.D., Lexington

3:15 "Traumatic Hemipelvectomy"—Case Reports
Dennis Havens, M.D., Ashland

3:30 Intermission to Visit Exhibits

4:00 Business Meeting

Kentucky Orthopaedic Society

Louisville & Kentucky Rooms
Ramada Inn

1:30 "Diagnosis and Treatment of Abnormalities Involving Upper Cevical Spine"
William Fielding, M.D., New York, N.Y.

2:00 "Treatment of Infected Fractures"
Thomas D. Brower, M.D., Lexington

2:30 Intermission to Visit Exhibits

3:00 "Treatment of Giant Cell Tumors of the Spine"
Harry Lee Bailey, M.D., Lexington

3:30 "Treatment of Supracondylar T Fracture of the Humerus in Adults"
George Wright, M.D., Louisville

Kentucky Society of Pathologists

Cincinnati Room

1:30 "Diethylstilbesterol Related Clear-Cell Adenocarcinoma of the Vagina"
Stanley J. Robboy, M.D., Boston, Mass.

Kentucky Chapter, American Academy of Pediatrics

Assembly Hall

1:30 "The Injured Child—Evaluation and Initial Management"
Thomas S. Morse, M.D., Columbus, Ohio

2:30 Intermission to Visit Exhibits

3:00 "Intentional Burning—A Severe Form of Child Abuse"
Thomas S. Morse, M.D., Columbus, Ohio

3:15 "Update From PACT Program (Parents and Children Together)"
Mary A. Smith, M.D., Louisville

3:45 "Child Abuse and the Law"
Mitchell A. Charney, M.D., J.D., Louisville

4:15 "Recent Advances in Child Abuse"
Ms. Mary Jones, PACT Program Director, Louisville

4:30 Business Meeting

Kentucky Society for Plastic and Reconstructive Surgery

Majestic Room

1:30 Videotape—"Reduction Mammoplasty"
William E. Schatten, M.D.

2:00 Videotape—"Island Pedicle Flap"
Robert A. Chase, M.D.

2:30 Intermission to Visit Exhibits

3:00 Videotape—"Flexor Tendon Grafting"
J. William Littler, M.D.

3:30 Discussion
Raleigh Archer, M.D., Lexington

Kentucky Chapter, American College of Surgeons

Grand Republic Room

Program to be Announced

Kentucky Urological Association

Norton-Children's Hospital

1:30 "Perspectives in Urinary Diversion"
Ian M. Thompson, M.D., F.A.C.S., Columbia, Mo.

WEDNESDAY, SEPTEMBER 29

MORNING SESSION
General Session

John M. Baird, M.D., Danville
KMA Vice-President, Presiding

9:00 "Disseminated Intravascular Coagulation"
Stanley J. Robboy, M.D., Boston, Mass.

9:20 "The Management of Renal Trauma"
Ian M. Thompson, M.D., Columbia, Mo.

9:40 "Ultrasonic Diagnostics: The Eye and Orbit"
Arthur H. Keeney, M.D., Louisville

10:00 Intermission to Visit Exhibits

Theme: "Breast Problems"

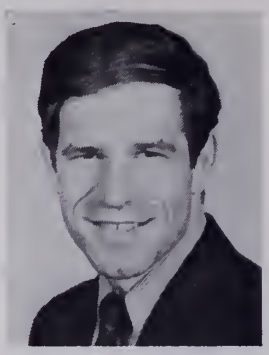
10:30 "Augmentation Mammoplasty"
Raleigh R. Archer, M.D., Lexington

10:50 "Mammography and Radiation Hazards"
Jerry Brooks Buchanan, M.D., Louisville

11:10 "Adjuvant Chemotherapy for Breast Cancer"
John Durant, M.D., Birmingham, Ala.

11:40 "Breast Cancer and Its Treatment: An Holistic Approach"
Danielle Turns, M.D., Louisville

STANLEY J. ROBBOY, M.D.
Boston, Massachusetts



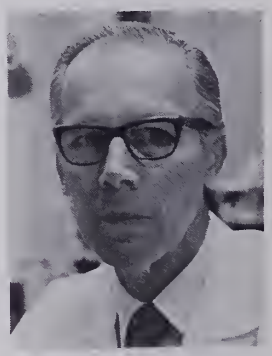
Assistant Professor in Pathology, Harvard Medical School. M.D., 1965, University of Michigan. Visiting Associate Professor of Pathology, University of Pahlavi Medical School, Shiraz, Iran. Assistant Pathologist, Registry of Clear-Cell Adenocarcinoma of the Genital Tract in Young Females. Member, College of American Pathology, American Society of Clinical Pathologists, International Academy of Pathology. Author of over 50 publications dealing with endocrine pathology of the female genital tract.

IAN M. THOMPSON, M.D.
Columbia, Missouri



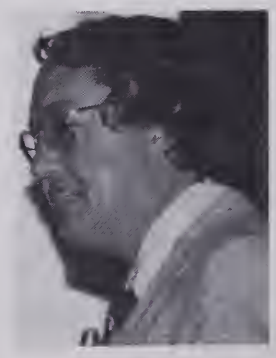
Professor and Chairman, Section of Urology, University of Missouri School of Medicine. M.D., 1947, New York Medical College. Past President, Society for Pediatric Urology. Fellow, American College of Surgeons, American Academy of Pediatrics. Member, American Uralogical Association, Western Urological Forum, American Association of Genito Urinary Surgeons, International Society of Urology.

ARTHUR H. KEENEY, M.D.
Louisville, Kentucky



Dean and Professor of Ophthalmology, University of Louisville School of Medicine. M.D., 1944, University of Louisville. Past president, American Association for Automotive Medicine. Associate Editor, American Journal of Ophthalmology and serves on editorial boards of numerous other journals. Fellow, American Ophthalmological Society, American Academy of Ophthalmology and Otolaryngology. Secretary-Treasurer, National Committee for Research in Ophthalmology and Blindness. Chairman, Medical Advisory Board, National Aid to Visually Handicapped.

JERRY B. BUCHANAN, M.D.
Louisville, Kentucky



Assistant Professor and Chief, Diagnostic Radiology, University of Louisville School of Medicine. M.D., 1965, University of Louisville. Head, Section of Vascular Radiology and Mammography, U.L. Co-Director, Breast Cancer Demonstration Project, U.L. Advisory Committee, Breast Cancer Prototype Network Project. Board of Delegates, Kentucky Division, American Cancer Society. Member, Ad Hoc Committee on Early Detection of Breast Cancer, American College of Radiology.

JOHN R. DURANT, M.D.
Birmingham, Alabama



Professor of Medicine, University of Alabama in Birmingham. M.D., 1956, Temple University Medical Center. Director, Cancer Research and Training Center and Chairman, Southeastern Cooperative Cancer Study Group, University of Alabama. Executive Committee, American Red Cross. Editorial Advisory Board, Oncology News. Member, Cancer Centers Review Committee, National Cancer Institute. Fellow, American College of Physicians. Member, American Society of Clinical Oncology, American Society of Hematology.

DANIELLE M. TURNS, M.D.
Louisville, Kentucky



Associate Professor of Psychiatry, University of Louisville School of Medicine. M.D., 1960, Faculte de Medecine de Lyon. Director, Counseling and Follow-Up Program, U.L. Cancer Center. Member, American Psychiatry Association, American Psychopathological Association. Author and co-author of numerous articles and presentations on the psychological aspects of cancer.

ARTHUR C. WHITE, M.D.
Indianapolis, Indiana



Professor of Medicine and Director, Infectious Diseases Division, Indiana University School of Medicine. M.D., 1952, Harvard University. Advisory Panel on Infectious Disease Therapy on the General Committee of Revision of the U.S. Pharmacopeia. Fellow, American College of Physicians. Member, Southern Society for Clinical Investigation, Infectious Diseases Society of America, Central Society for Clinical Research.

WILLIAM A. ALTEMEIER, M.D.
Cincinnati, Ohio



Christian R. Holmes Chairman and Professor of Surgery, University of Cincinnati Medical Center. M.D., 1938, University of Michigan. Director of Surgical Services, Cincinnati General Hospital. Governor, American College of Surgeons. Past president, American Surgical Association. President, Society for Surgery of the Alimentary Tract. Recipient, ACS Distinguished Service Award, 1975. Editorial Board member, Annals of Surgery and Journal of Surgical Research.

PRESIDENT'S LUNCHEON

Banquet Area, Bluegrass Convention Center

12:00 noon

David A. Hull, M.D., Lexington
KMA President, Presiding

Invocation

Recognition

Awards Presentation

Fred C. Rainey, M.D., Elizabethtown
Chairman, KMA Awards Committee

Luncheon Speaker

J. Ed McConnell, Louisville
Advisory Chairman of Corporate Boards
Kentucky Blue Cross, Blue Shield and Delta Dental

Installation of the New KMA President

WEDNESDAY SEPTEMBER 29

AFTERNOON SESSION

General Session

Richard F. Hench, M.D., Lexington
Chairman, KMA Scientific Program Committee
Presiding

Theme: "Infectious Diseases"

2:00 **"Recent Advances in Antibiotic Therapy"**
Arthur C. White, M.D., Indianapolis, Ind.

2:30 **"Antibiotic Prophylaxis in Clean Surgery"**
William A. Altemeier, M.D., Cincinnati, Ohio

3:00 **Intermission to Visit Exhibits**

3:30 **"Tetanus In Kentucky, 1970-1975"**
Robert C. Noble, M.D., Lexington

3:50 **"Influenza Virus: Clinical Presentation and Epidemiology with Specifics on Swine Flu Virus"**
Martin J. Raff, M.D., Louisville

4:10 **Panel Discussion on "Antibiotics"**
Arthur C. White, M.D., Indianapolis, Ind.
William A. Altemeier, M.D., Cincinnati, Ohio
Robert C. Noble, M.D., Lexington
Martin J. Raff, M.D., Louisville

4:30 **Question and Answer Period**

THURSDAY SEPTEMBER 30

MORNING SESSION

General Session

James B. Holloway, Jr., M.D., Lexington
Vice-Chairman, KMA Board of Trustees, Presiding

9:00 **"Is the Routine PAP Enough After 40?"**
Robert W. Muenzer, M.D., Toledo, Ohio

9:20 **"Birth Control Pills"**
Robert L. Burket, M.D., Cincinnati, Ohio

9:40 **"Changing Patterns in Head and Neck Surgery"**
John S. Turner, M.D., Atlanta, Ga.

10:00 **Intermission to Visit Exhibits**

10:30 **"CAT Scanning—A New Dimension"**
Daryl L. Dochterman, M.D., Lexington

10:50 "The Impact of Computerized Autotomography on the Practice of Neurosurgery"
Ross H. Miller, M.D., Rochester, Minn.

11:10 "Necrotizing Vasculitis"
W. Mitchell Sams, Jr., M.D., Chapel Hill, N.C.

11:30 "Medical Examinations Under OSHA; Professionalism Versus Legalism"
Marcus M. Key, M.D., Houston, Texas

THURSDAY, SEPTEMBER 30

AFTERNOON SESSION

Eight Specialty Group Meetings

(Simultaneous scientific programs of eight specialty groups will be held at 1:30 p.m. All KMA members are invited and no general sessions will be held this afternoon.)

Kentucky Dermatological Society

1:30 Patient Demonstration with Case Histories
Norton-Childrens Hospital Clinic Area (follow signs)

3:00 Coffee and Donuts

3:30 Discuss Cases—UL Medical Dental School (follow signs)
W. Mitchell Sams, Jr., M.D., Chapel Hill, N.C.

4:30 Business Meeting

Kentucky ENT Society

Natchez Room

1:30 "Intracranial Complications of Facial Fractures"
John S. Turner, M.D., Atlanta, Ga.

2:30 Intermission to Visit Exhibits

3:00 "A Fourteen-Year Profile of Meniere's Disease"
John S. Turner, M.D., Atlanta, Ga.

3:30 Business Meeting

Kentucky Chapter, American Academy of Family Physicians

General Assembly Hall

1:30 "Adolescent and Teenage GYN Problems???—Socially and Medically"
Robert L. Burket, M.D., Cincinnati, Ohio

2:30 Intermission to Visit Exhibits

Kentucky Neurosurgical Association

Delta Queen Room

1:30 "Combined Chemotherapy for Malignant Gliomas—A Pilot Study"
Richard Mortara, M.D., Lexington

1:50 "Total Microsurgical Excision of Giant Frontobasal Tumors"
John Guarneschelli, M.D., Louisville

2:10 "Treatment of Carotid Cavernous Fistula by Transcavernous Approach"
Christopher Shields, M.D., Louisville

2:30 Intermission to Visit Exhibits

ROBERT C. NOBLE, M.D.
Lexington, Kentucky



Assistant Professor of Medicine, Division of Infectious Diseases, University of Kentucky College of Medicine. M.D., 1964, Duke University School of Medicine. Fellow, American College of Physicians. Member, Association for Practitioners in Infection Control, American Venereal Disease Association, American Federation for Clinical Research. Research work in classification of gonococci and antigen analysis for USPHS.

MARTIN J. RAFF, M.D.
Louisville, Kentucky



Associate Professor of Medicine and Chief, Section of Infectious Diseases, University of Louisville School of Medicine. M.D., 1965, University of Texas Medical Branch. Associate in Microbiology and Coordinator, Clinical Diagnosis, U.L. Consultant in Infectious Diseases at many local hospitals. Fellow, American College of Physicians. Member, American Society for Microbiology, Louisville Society of Internists, American Federation for Clinical Research, National Foundation for Infectious Diseases.

ROBERT W. MUENZER, M.D.
Toledo, Ohio



Associate Professor of Obstetrics and Gynecology, Medical College of Ohio. M.D., 1944, University of Michigan. Former President, Norman F. Miller Society of Obstetricians and Gynecologists. Diplomat, American Board of Obstetricians and Gynecologists. Member, Central Association and American College of Obstetricians and Gynecologists. Board member, Visiting Nurse Service. Medical Advisor, Family Services of Greater Toledo.

ROBERT L. BURKET, M.D.
Cincinnati, Ohio



Private practitioner in obstetrics and gynecology. M.D., 1950, University of Cincinnati College of Medicine. Certified, American Board of Obstetrics and Gynecology. Guest speaker for numerous programs on adolescent health problems. Author and co-author of several scientific articles dealing with contraception, particularly with adolescents.

JOHN S. TURNER, JR., M.D.
Atlanta, Georgia



Professor and Chief, Division of Otoloryngology, Emory University. M.D., 1955, Emory University Medical School. Georgia State Chairman, National Deafness Research Foundation and Chairman, Committee of Specialty Nomenclature of the American Council of Otolaryngology. Fellow, American Laryngological, Rhinological and Otological Society; American Academy of Ophthalmology & Otolaryngology; Association for Academic Surgery. Member, American Council of Otolaryngology.

DARYL L. DOCHTERMAN, M.D.
Lexington, Kentucky



Radiologist, St. Joseph Hospital. M.D., 1966, Iowa Medical School. Internship, Sioux Valley Hospital, Sioux Falls. Fellow, American College of Radiology. Current field of work in angiography, CAT scanning, nuclear medicine.

ROSS H. MILLER, M.D.
Rochester, Minnesota



Assistant Professor in Neurosurgery, Mayo Graduate School of Medicine, University of Minnesota. M.D., 1946. University of Oklahoma Medical School. Internship, St. Luke's Hospital, Cleveland. Member, American Association of Neurological Surgeons, Neurosurgical Society of America, Congress of Neurological Surgeons, American College of Surgeons.

W. MITCHELL SAMS, JR., M.D.
Chapel Hill, North Carolina



Professor of Dermatology, University of North Carolina. M.D., 1959, Emory University, Georgia. Secretary-Treasurer, Society for Investigative Dermatology. Fellow, American Academy of Dermatology. Diplomat, American Board of Dermatology. Editorial Board of Archives of Dermatology. Member, American Dermatologic Association, American Federation for Clinical Research.

3:00 "Third Ventricle Tumors"
Ross Miller, M.D., Rochester, Minn.
3:20 "Post Traumatic Epilepsy Prophylaxis"
Byron Young, M.D., Lexington
3:40 "Report of Experience to Date of Percutaneous Cordotomy and Trigeminal Rhizotomy"
Richard Jelsma, M.D., Louisville
4:00 Business Meeting

Kentucky Obstetrical and Gynecologic Society

Island Queen-Idlewild Rooms

1:30 "Diagnosis and Treatment of Endometrial Abnormalities"
Robert W. Muenzer, M.D., Toledo, Ohio
2:00 "Management of Abnormal Uterine Bleeding"
Robert Carter, M.D., Kansas City, Kan.
2:30 Intermission to Visit Exhibits
3:00 "Estrogen Therapy Pros and Cons"—Panel Discussion
Marvin A. Yussman, M.D., Louisville, Moderator
Robert Carter, M.D., Kansas City, Kan.
Robert W. Muenzer, M.D., Toledo, Ohio
Emery A. Wilson, M.D., Lexington

Kentucky Occupational Medical Association

Cincinnati Room

1:30 "Occupational Cancer"
Marcus M. Key, M.D., Houston, Tex.

Kentucky Psychiatric Association

Majestic-New Orleans Rooms

1:30 "Epidemiology of Mental Illness"
John J. Schwab, M.D., Louisville
2:30 Intermission to Visit Exhibits
3:00 Business Meeting

Kentucky Chapter, American College of Physicians

Grand Republic Room

Program to be Announced

MARCUS M. KEY, M.D.
Houston, Texas



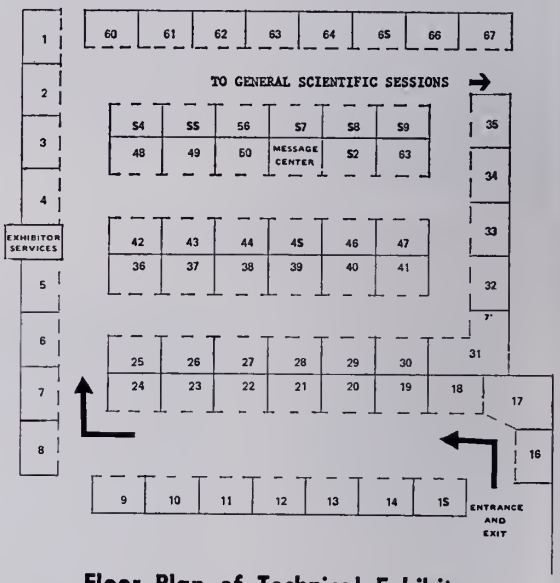
Professor of Occupational Medicine, School of Public Health, University of Texas Health Science Center. M.D., 1952, College of Physicians and Surgeons (Columbia). Past Chairman, American Conference on Governmental Industrial Hygienists. Fellow, American Occupational Medical Association and American Academy of Occupational Medicine. Expert Consultant (Occupational Health), World Health Organization. Member, Board of Editors, Archives of Environmental Health.

1976 Technical Exhibitors To Offer Information On Latest Advances in Products, Services

The latest developments in medical techniques and information will be featured in the numerous technical exhibits at the 1976 Annual Meeting. Located in the Bluegrass Convention Center, the exhibitors will be available to discuss the latest discoveries and innovations in their products and the most up-to-date advances in their services.

All exhibits have been prepared carefully and skillfully to appeal to you, the physician, and have been geared to your special interests as a practitioner. You will have a unique opportunity to secure a vast amount of knowledge and information conveniently and effortlessly in a short period of time.

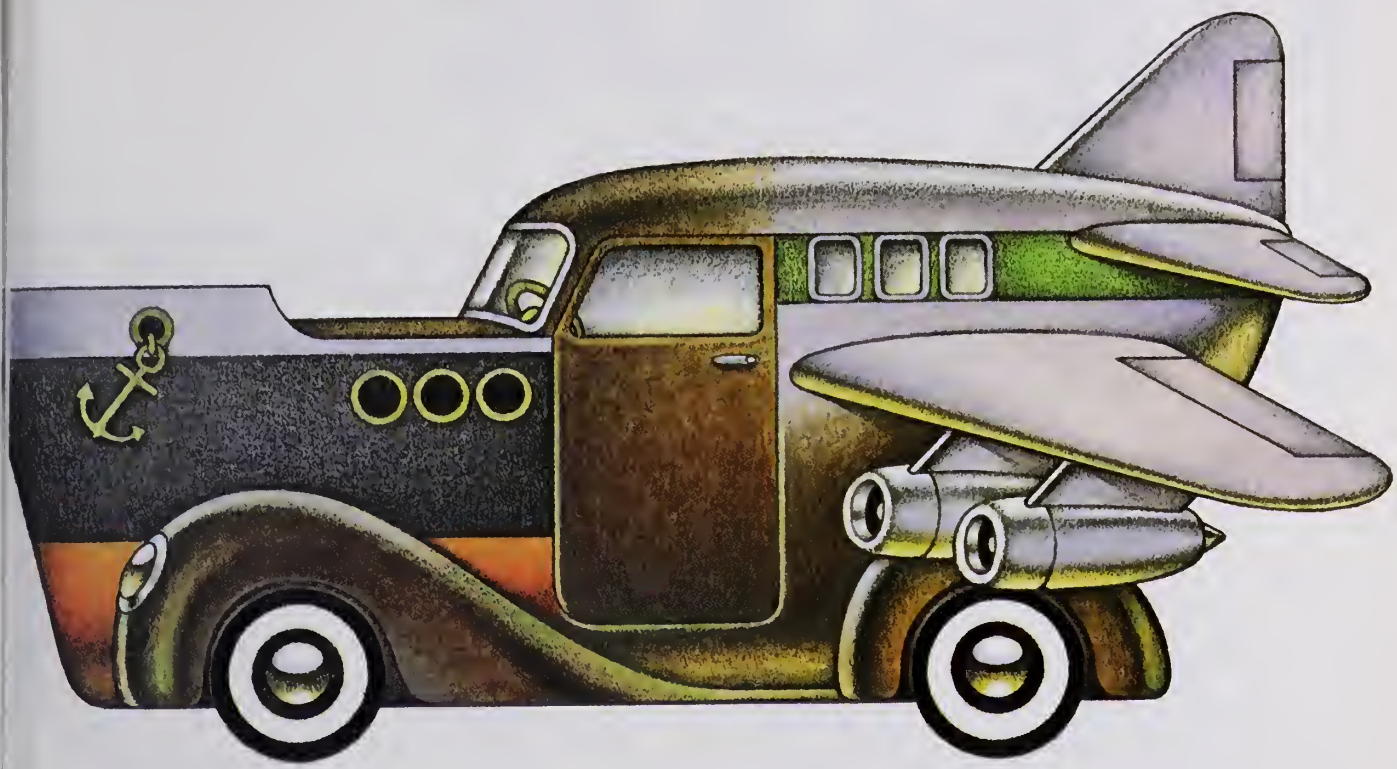
In order to give every KMA member and guest ample time to take advantage of this opportunity, 30-minute intermissions for visiting the exhibits have been scheduled during each general and specialty group session.



Floor Plan of Technical Exhibits

1976 TECHNICAL EXHIBITORS

Abbott Laboratories (8)
Acme Visible Records, Inc. (38)
Ames Company (13)
Arnar-Stone Laboratories, Inc. (67)
Astra Pharmaceutical Products, Inc. (45)
Blue Cross and Blue Shield and Delta Dental of Kentucky (15)
Boehringer Ingelheim Ltd (57)
Burroughs Wellcome Company (2)
Central Pharmacal Company (52)
CIBA Pharmaceutical Company (19)
Commonwealth Leasing Louisville (62)
Coulter Electronics, Inc. (39)
Crocker-Fels Company (35)
Dictaphone Corporation (65)
Dolbey and Company (SONY) (55)
Dow Chemical Company (29)
Eaton Laboratories (18)
Encyclopaedia Britannica, Inc. (49)
Fisons Corporation (12)
Gerber Products Company (59)
Glencoe Research, Inc. and Sheryl Pharmaceuticals, Inc. (30)
Guild of Prescription Opticians of Kentucky (23)
Hoechst-Roussel Pharmaceuticals (47)
International Clinical Laboratories of Kentucky (44)
International Medical Electronics, Ltd (56)
Ives Laboratories, Inc. (37)
John Hancock Life Insurance Company (9)
The Lang Company (43)
Lederle Laboratories (7)
A. P. Lee Agency (20)
Eli Lilly and Company (24)
Lorillard (53)
Louisville Medical Laboratory, Inc. (34)
Malkin Instrument Company (42)
Marion Laboratories, Inc. (1)
Mead Johnson Laboratories (21)
MeDec Management, Inc. (28)
Medical Data Services, Inc. (46)
The Medical Protective Company (5)
Metropolitan-Medicare Office (61)
Meyer Laboratories, Inc. (4)
Micro-Mode Industries, Inc. (41)
Mitchell Orthopedic Supply (31)
Ortho Pharmaceutical Corporation (16)
Parke, Davis and Company (36)
Pathology and Cytology Laboratories, Inc. (27)
Paul Revere Insurance Company (3)
Pfizer Labs (14)
William P. Poythress and Co., Inc. (6)
Ransdell Surgical, Inc. (10)
R. J. Reynolds Tobacco Company (40)
Riker Laboratories, Inc. (26)
A. H. Robins Company (66)
Roche Laboratories (63)
J. B. Roerig (22)
Ross Laboratories (25)
Sandoz Pharmaceuticals (11)
W. B. Saunders Company (58)
Clayton L. Scroggins Associates, Inc. (32)
Searle Laboratories (60)
Stuart Pharmaceuticals (48)
Systemedics/AMS (50)
United States Air Force Medical Services (54)
Wyeth Laboratories (33)
Zimmer Kloenne of Kentucky, Inc. (17)



On land, sea, and in the air...

Up to 24 hours of effective control with a single dose...in nausea, vomiting and dizziness associated with motion sickness.

Dosage: 25 to 50 mg. 1 hour before travel.

Available on prescription only.

BRIEF SUMMARY OF PRESCRIBING INFORMATION

CONTRAINDICATIONS. Administration of Antivert during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

Antivert®/25 Chewable Tablets
(meclizine HCl) 25 mg.
for motion sickness

DYAZIDE®

Trademark

Each capsule contains 50 mg. of Dyrenium® (triamterene, SK&F Co.) and 25 mg. of hydrochlorothiazide.

MAKES SENSE FOR LONG-TERM CONTROL OF HYPERTENSION*



Before prescribing, see complete prescribing information in SK&F literature or *PDR*. The following is a brief summary.

* **Warning**
This fixed combination drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

* **Indications:** *Edema:* That associated with congestive heart failure, cirrhosis of the liver, the nephrotic syndrome; steroid-induced and idiopathic edema; edema resistant to other diuretic therapy. *Mild to moderate hypertension:* Usefulness of the triamterene component is limited to its potassium-sparing effect.

Contraindications: Pre-existing elevated serum potassium. Hypersensitivity to either component. Continued use in progressive renal or hepatic dysfunction or developing hyperkalemia.

Warnings: Do not use dietary potassium supplements or potassium salts unless hypokalemia develops or dietary potassium intake is markedly impaired. Enteric-coated potassium salts may cause small bowel stenosis with or without ulceration. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematolc studies in cirrhotics with splenomegaly. A hypertensive effects may be enhanced in p sympathectomy patients. The following r occur: hyperuricemia and gout, reversible trogen retention, decreasing alkali reserve w possible metabolic acidosis, hyperglycemia a glycosuria (diabetic insulin requirements may altered), digitalis intoxication (in hypokalem Use cautiously in surgical patients. Concomit use with antihypertensive agents may result in additive hypotensive effect. 'Dyazide' interfe with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakn dizziness, headache, dry mouth; anaphyla rash, urticaria, photosensitivity, purpura, ot dermatological conditions; nausea and vomit (may indicate electrolyte imbalance), diarrh constipation, other gastrointestinal disturban Necrotizing vasculitis, paresthesias, icterus, p creatitis, xanthopsia and, rarely, allergic pn monitis have occurred with thiazides alone.

Supplied: Bottles of 100 capsules; in Single U Packages of 100 (intended for institutional only).

SK&F CO., Carolina, P.R. 00630
Subsidiary of SmithKline Corporation

TRIAMTERENE CONSERVES POTASSIUM WHILE HYDROCHLOROTHIAZIDE LOWERS BLOOD PRESSURI

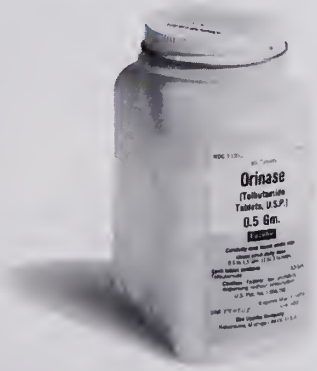
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Orinase®

tolbutamide, Upjohn

0.5 Gm tablets



This new design will help pharmacists, physicians, nurses, and patients identify Orinase by name and manufacturer. The number on the tablet is for identification and is not related to tablet strength.

You may wish to advise your patients that this change is taking place.

J-5255-6

The Upjohn Company, Kalamazoo, Michigan 49001 **Upjohn**

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WHEN ANXIETY INTERFERES.

The cardiac patient and anxiety.



"The [cardiac] patient is anxious about minor symptoms, about the implications of his diagnosis, and about real or imagined limitations of function."*

The worst is over. The cardiac patient is out of the acute stage, out of the hospital, and well on his way to recovery. How quickly he comes back to near normal functioning may depend on his psychological as well as his physical rehabilitation.

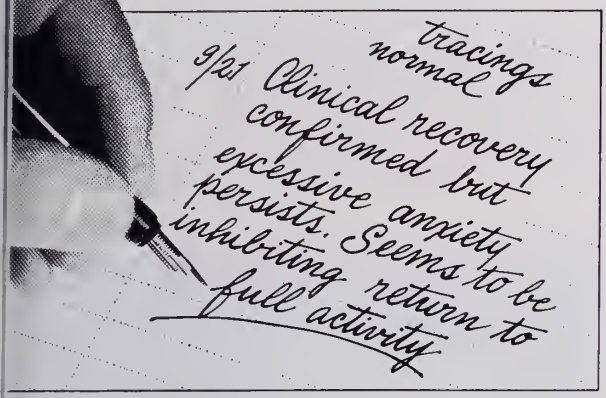
Clinical anxiety, for example, may be one reason for prolonged recuperation following cardiac healing. Yet anxiety can sometimes be beneficial in facilitating patient compliance.

The patient who is realistically concerned about resuming his precoronary functioning may be highly motivated to adhere to his rehabilitation regimen. However, the cardiac patient with *excessive* or unresolved anxiety may be so fearful of future heart failure that he refrains from your prescribed regimen. These excessively anxious cardiac patients eventually present the same clinical characteristics as patients deconditioned by bed rest.

Excessive anxiety can interfere with patient management

When excessive anxiety diminishes your

ent's ability to participate fully in his rehabilita-
n program, your counseling and reassurance are
n sufficient. But when his anxiety is so great that
ctually interferes with his ability to listen and
ond, you may want to consider the addition
of an adjunctive antianxiety agent to help
reduce his excessive anxiety to more
manageable levels.



Librium® (chlordiazepoxide HCl) an effective adjunct to your reassurance and counseling

Safety: Librium has a highly favorable
nefits-to-risk ratio and a wide margin of safety.
cause of its low incidence of side effects, it
egarded as one of the safest antianxiety agents
ailable. And Librium does not adversely affect the
rdiovascular system. See complete product
formation for warnings, precautions and adverse
actions.

Performance: Hundreds of clinical
als, thousands of published papers, and millions
patients comprise the record of performance for
brium.

Concomitant use: Of special signi-
ance in treating the cardiac patient already
king multiple agents is the fact that Librium is used
ncomitantly with most primary medications, such
cardiac glycosides, diuretics and antihypertensives.

ohman BL: *Geriatrics* 28:110-119, Feb 1973

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Supplied: Librium® Capsules containing 5 mg, 10 mg or 25 mg chlordiazepoxide HCl. Libritabs® Tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.

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Roche Laboratories
Division of Hoffmann-La Roche Inc.
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Adjunctive
LIBRIUM® IV
chlordiazepoxide HCl/Roche
5 mg, 10 mg, 25 mg capsules
THE ANXIETY-SPECIFIC

VISUAL FOCUS ON ACUTE GOUTY ARTHRITIS



Foot of patient with acute gouty arthritis as seen by conventional x-ray.



Scintiphotogram of same foot reflects inflammatory process.

The scintiphotograph on the right shows increased uptake of radiotechnetium polyphosphate in the metatarsophalangeal joint and the proximal interphalangeal joint of the great toe of a patient with acute gouty arthritis. This increased uptake probably results from increased vascularity in the affected areas.

For a more detailed description of scintiphotography, see "addendum" at right.

THERAPEUTIC FOCUS ON

CAPSULES, 25 mg and 50 mg

INDOCIN®

(INDOMETHACIN | MSD)

helps relieve pain and other symptoms of inflammation in acute gouty arthritis in selected patients

INDOCIN is a potent drug with anti-inflammatory, antipyretic, and analgesic properties. It should not be used in conditions other than those recommended. Although INDOCIN does not alter the progressive course of the underlying disease, in selected patients with acute gouty arthritis it has been found highly effective in relieving pain and in reducing fever, swelling, and tenderness.

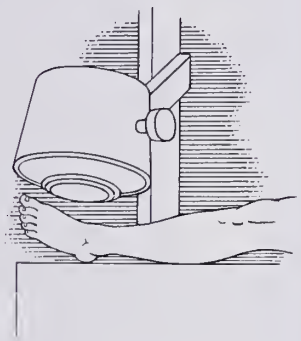
MSD
MERCK SHARP & DOHME

For a brief summary of prescribing information, please see following page.

addendum

MSD
MERCK SHARP & DOHME

Facts about Scintiphotography



In recent years a variety of radiopharmaceuticals have been employed to aid in the diagnosis of bone and joint disorders. The joint-imaging technique consists of injecting technetium polyphosphate intravenously, and imaging is performed with the scintillation camera two hours after the administration of the radionuclide. In general, for joint surveying, the shoulders, elbows, hands, wrists, knees, ankles, feet, and vertebral column are mapped. The entire scanning process takes approximately one hour. The criterion for a positive image is a higher concentration of radioactivity in a joint region than in adjacent nonarticular bone. In effect, each patient serves as his own control.

INDOCIN®
(INDOMETHACIN | MSD)



helps relieve pain
and other symptoms
of inflammation
in acute
gouty arthritis
in selected patients

IMPORTANT NOTE: INDOCIN (Indomethacin, MSD) cannot be considered simple analgesic and should not be used in conditions other than those recommended. The drug should not be prescribed for children because safe conditions for use have not been established.

Because of the high potency of the drug and the variability of its potential to caus adverse reactions, the following are strongly recommended: 1) the lowest possib effective dose for the individual patient should be prescribed. Increased dosag tends to increase adverse effects, particularly in doses over 150-200 mg per da without corresponding clinical benefits; 2) careful instructions to, and observatior of, the individual patient are essential to the prevention of serious and irreversibl including fatal, adverse reactions, especially in the aging patient.

Contraindications: Children 14 years of age and under; pregnant women and nur ing mothers; active gastrointestinal lesions or history of recurrent gastrointestin lesions; allergy to aspirin or indomethacin.

Warnings: *Gastrointestinal Effects:* Because of the occurrence and, at time severity of gastrointestinal reactions, be continuously alert for any sign or sympto signaling a possible gastrointestinal reaction. The risks of continuing therapy wit INDOCIN in the face of such symptoms must be weighed against the possible be efits to the individual patient. Gastrointestinal effects may be reduced by givir the drug immediately after meals, with food, or with antacids. Use greater care aging patients.

Ocular Effects: Corneal deposits and retinal disturbances, including those of th macula, have been observed in some patients on prolonged therapy. Discontinu therapy if such changes are observed. Ophthalmologic examination at periodic i tervals is desirable in patients on prolonged therapy.

Central Nervous System Effects: INDOCIN may aggravate psychiatric disturbance epilepsy, and parkinsonism, and should be used with considerable caution in p tients with these conditions. If severe CNS adverse reactions develop, discontinu the drug.

Precautions: Blurred vision may be a significant symptom that warrants thorough ophthalmologic examination. Patients should be cautioned about enga ing in activities requiring mental alertness and motor coordination, as driving a c Headache which persists despite dosage reduction requires complete cessation the drug. May mask the usual signs and symptoms of infection; therefore, th physician must be continually on the alert for this and should use the drug with e tra care in the presence of existing controlled infection. After the acute phase of th disease is under control, an attempt to reduce the daily dose should be made r peatedly until the patient is off entirely.

Drug Interactions: Although INDOCIN has not influenced the hypoprothrombinem produced by anticoagulants, patients on anticoagulant therapy should be observe closely for alterations in prothrombin time. In patients receiving probenecid, plasn levels of indomethacin are likely to be increased and a lower total daily dose INDOCIN may produce a therapeutic effect; increases in the dose of INDOC should be made cautiously and in small increments.

Adverse Reactions: *Gastrointestinal Reactions:* Single or multiple ulcerations the esophagus, stomach, duodenum, or small intestine, including perforation ar hemorrhage, with fatalities in some instances; rarely, intestinal ulceration has bee associated with stenosis and obstruction; gastrointestinal bleeding without obviou ulcer formation; perforation of preexisting sigmoid lesions (diverticulum, ca cinoma, etc.); rarely, increased abdominal pain in ulcerative colitis patients development of ulcerative colitis and regional ileitis; gastritis may persist after th cessation of the drug; nausea, vomiting, anorexia, epigastric distress, abdomin pain, and diarrhea.

Eye Reactions: Corneal deposits and retinal disturbances, including those of th macula, have been observed on prolonged therapy; blurring of vision.

Hepatic Reactions: Rarely, toxic hepatitis and jaundice, including some fatal case

Hematologic Reactions: Aplastic anemia, hemolytic anemia, bone marrow d pression, agranulocytosis, leukopenia, and thrombocytopenic purpura may occ rarely. Since some patients manifest anemia secondary to obvious or occult gastr intestinal bleeding, appropriate blood determinations are recommended.

Hypersensitivity Reactions: Acute respiratory distress, a rapid fall in blood pressu resembling a shock-like state, angioedema, dyspnea, asthma, angiitis, pruritus, u ticaria, skin rashes, purpura.

Ear Reactions: Hearing disturbances—deafness reported rarely; tinnitus.

Central Nervous System Reactions: Psychic disturbances including psychot episodes, depersonalization, depression, and mental confusion; coma; convulsion peripheral neuropathy; drowsiness; lightheadedness; dizziness; syncop headache.

Cardiovascular-Renal Reactions: Edema, elevation of blood pressure, hematuria.

Dermatologic Reactions: Loss of hair, erythema nodosum.

Miscellaneous: Rarely, vaginal bleeding, hyperglycemia, glycosuria, ulcerati stomatitis, and epistaxis.

Supplied: Capsules containing 25 mg indomethacin each, in single-unit package of 100 and bottles of 100 and 1000; capsules containing 50 mg indomethacin eac in single-unit packages of 100 and bottles of 100.

For more detailed information, consult your MSD representative or see full prescri ing information. Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, F 19486

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ORGANIZATION SECTION

KMA Executive Assumes Positions On AAMSE, PCMA Boards

Robert G. Cox, KMA Executive Director, was elected to the Board of Directors of the American Association of Medical Society Executives at the recent AMA Convention in Dallas. In addition, he will continue to serve as a member of the Advisory Committee to the AMA Executive Vice President.


Mr. Cox

In January, Mr. Cox was elected an officer of the Professional Convention Managers Association on whose Board he has served the past three years. PCMA generates over one-half billion dollars of convention business annually. He also recently participated as a member of a special U. S. team to study the British Health System, a report on which is planned for the KMA House of Delegates in September.

AMA Reaffirms, Revises, Reacts At Recent Annual Meeting

Richard E. Palmer, M.D., Alexandria, Va., was installed as the 131st President of the American Medical Association at its recent Annual Convention in Dallas. Elected to serve as AMA President for 1977-1978 was John H. Budd, M.D., Cleveland.

In other business matters, the AMA House of Delegates reaffirmed its endorsement of the Association's Medicredit proposal for national health insurance (HR 6222 now before Congress). The AMA Council system was restructured as the House approved changes to establish size, purpose, and tenure for eight standing councils. In other action, the House voted to continue the $250 dues rate for regular members noting the Association's improved financial status.

In his inaugural address, Doctor Palmer called for unity in the AMA to combat federal intrusion into medicine. He cited the federal government as the biggest threat to the medical profession.

Take This Issue Home To Your Wife

You are urged to take this issue home for your wife to read. Many activities planned during the Annual Meeting will be of interest to her. The program for the Annual Convention of the Auxiliary to KMA is also included in this issue.

NEWS ITEMS

Jannice Owens, medical student from the University of Louisville, was elected as Chairperson of the AMA Students Business Session at the AMA Annual Convention held June 26-July 1 in Dallas. Ms. Owens is a member of the KMA-KNA Joint Practice Committee.

Carroll L. Witten, M.D., Louisville, was re-elected as Chairman of the AMA Council on Constitution and Bylaws. Doctor Witten, a family physician, has served on this Council since 1969 and was elected Chairman in 1974.

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American College of Radiology
Commission on Cancer

INTERIM STATEMENT ON BREAST CANCER DIAGNOSIS

The following position paper on mammographic examination, as disseminated by the American College of Radiology, is felt by your Editorial Board to be timely and concise, and to warrant dissemination to our readership.

I. INTRODUCTION

Mammography has proven to be the most effective diagnostic tool so far developed for the detection of breast cancer at an early stage before it spreads to regional lymph nodes. This early detection increases the probability of cure. Mammography at appropriate intervals in asymptomatic women over age 35 promises to reduce significantly the number of deaths from breast cancer.

Since there is now no definitive scientific evidence with regard to:

1. optimal age for the initial mammogram;
2. frequency of examination;
3. data on possible long term radiation risk;

this statement is being issued, as a summary of current informed opinion.

II. CARE OF WOMEN WITH SYMPTOMS

In women who have symptoms or physical findings suggestive of possible breast cancer, medical decisions must be individualized to fit the patient's needs. Under these circumstances, mammography is an integral part of the evaluation of the patient.

III. SCREENING OF ASYMPTOMATIC WOMEN

Recognizing that definitive data are not yet available that allow the establishment of firm criteria that define a protocol for the screening for breast cancer in asymptomatic women, the ACR recommends the following:

1. All women should have annual physical examination of the breasts and be taught breast self-examination.
2. For asymptomatic women the first, or baseline, mammographic examination should be performed between the ages of 35 and 40.
3. Subsequent mammographic examinations should be performed at one to three year intervals unless more frequent examination is medically warranted.
4. After age 50, annual or other regular interval examinations, including mammography, should be performed.
5. Although the carcinogenic effects of radiation at current levels of exposure are probably immeasurably small, continuing attempts to reduce exposure should be made. However, image quality must be preserved for accurate diagnosis to insure the best risk/benefit (cure) ratio.
6. Each radiologist should assure the periodic monitoring of his equipment and procedures to determine that the patient's exposure is being maintained at the lowest feasible level.

IV. RESEARCH PROGRAMS

The protocol currently being followed by the NCI/ACS sponsored "Breast Cancer Detection Demonstration Projects" should be pursued so that the data are as complete and accurate as possible in order that meaningful conclusions can be drawn. Follow-up of the patients must be carried out for a number of years to insure collection and evaluation of the data. Theoretical concerns of possible radiation induced breast cancer do not warrant change in the current protocol of the "Breast Cancer Detection Demonstration Projects." Estimates of risk that include a radiation carcinogenic effect are of dubious validity because of the lack of objective scientific evidence. Research must be continued and encouraged to:

1. improve methods for measurement of low level radiation;
2. further reduce the radiation dose in mammography consistent with good image quality;
3. determine the most appropriate age at which to begin screening for different risk groups;
4. define women of high risk;
5. define those mammographic findings that dictate re-examination at a shorter interval;
6. establish the appropriate intervals for re-examination; and
7. collect evidence of the benefits and risks of mammography.

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POSTGRADUATE OPPORTUNITIES

SEPTEMBER

26-30 KMA Annual Meeting, Ramada Inn/Bluegrass Convention Center, Louisville

26-Oct. 2 Seventh Family Medicine Review*, University of Kentucky Medical Center. **(Identical session repeated October 17-23).** Fee: $295.

OCTOBER

7-8 "New Methods in Tumor Localization,"* University of Kentucky Medical Center, Lexington

30 Kentucky Regional Meeting, American College of Physicians, Stouffer's Louisville Inn, Louisville. Contact: Franklin B. Moosnick, M.D., 184 N. Mill Street, Lexington, Ky. 40507

NOVEMBER

3 Twelfth Annual Louisville Pediatric Society Lecture, Health Sciences Center, Louisville

4-5 Tenth Annual Newborn Symposium, University of Louisville School of Medicine, Health Sciences Center, Louisville

IN SURROUNDING STATES

SEPTEMBER

20-23 Annual Meeting, American Academy of Family Physicians, Sheraton-Boston, Boston

OCTOBER

4-5 24th Annual Assembly, Tennessee Valley Medical Assembly, Read House Chattanooga . . . Contact: Charles Portera, M.D., 960 E. 3rd St., Suite 313, Chattanooga, Tenn. 37403.

26-27 Symposium on Urgent and Controversial Pediatric Conditions, Indiana University School of Medicine, Stouffer's Indianapolis Inn, Indianapolis. Contact: Jay Grosfeld, M.D., James Whitcomb Riley Hospital for Children, 1100 W. Michigan St., Indianapolis, Ind. 46202.

**For further information, contact: Frank R. Lemon, M.D., Associate Dean for Continuing Education, University of Kentucky College of Medicine, Lexington 40506*

UPCOMING FEATURES

Annual Meeting Details—
November Journal

Digest of House of Delegates—
December Journal

Can pros like Bob Toski and Jim Flick help you improve your golf game?

Enough to win a 36-hole competition with your colleagues?



Find out September 19-25

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An American Medical Association sports event conducted by Golf Digest for AMA Members.

Along with the golf holiday, you'll have an opportunity to earn 7 hours of Category I credit! The medical seminar, "Critical Patients - Critical Decisions" focuses on diagnosis and management of life-threatening conditions in the hospital emergency room.

Registration is limited; the deadline is August 15, 1976!

Here's where to write for all the details -- Do it today!

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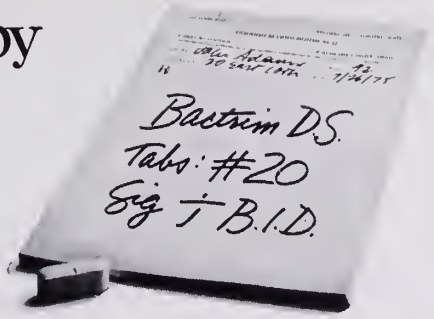
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10-day Bactrim therapy outperforms 10-day ampicillin therapy.



In a multicenter, double-blind study of patients with chronic or frequently recurrent urinary tract infection, Bactrim 10-day therapy outperformed ampicillin 10-day therapy by 27.2%, when comparing patients who maintained clear cultures for eight weeks. Criterion for "clear culture" was 1000 or fewer organisms/ml of urine.

While adverse reactions noted in this study were mild (*e.g.*, vomiting, nausea, rash), more serious reactions can occur with these drugs. See manufacturer's product information for complete listing. Maintain adequate fluid intake; perform frequent CBC's and urinalyses with microscopic examination.

Note: Bactrim tablets were used in these clinical trials. Bioequivalency studies show one Bactrim DS double strength tablet is equivalent to two Bactrim tablets.

Bactrim™ DS
(160 mg trimethoprim and 800 mg sulfamethoxazole)
Double Strength tablets
Just 1 tablet B.I.D.

Bactrim™
(80 mg trimethoprim and 400 mg sulfamethoxazole)
2 tablets B.I.D.

For chronic or frequently recurrent cystitis and pyelonephritis due to susceptible organisms.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Chronic urinary tract infections evidenced by persistent bacteriuria (symptomatic or asymptomatic), frequently recurrent infections (relapse or reinfection), or infections associated with urinary tract complications, such as obstruction. Primarily for cystitis, pyelonephritis or pyelitis due to susceptible strains of *E. coli, Klebsiella-Enterobacter, Proteus mirabilis, Proteus vulgaris* and *Proteus morganii.*

NOTE: The increasing frequency of resistant organisms limits the usefulness of antibacterials, especially in these urinary tract infections. The recommended quantitative disc susceptibility method (*Federal Register, 37*:20527-20529, 1972) may be used to estimate bacterial susceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond to Bactrim therapy. If infection is confined to the urine, "Intermediate susceptibility" also indicates a likely response. "Resistant" indicates that response is unlikely.

Contraindications: Hypersensitivity to trimethoprim or sulfonamides; pregnancy; nursing mothers.

Warnings: Deaths from hypersensitivity reactions, agranulocytosis, aplastic anemia and other blood dyscrasias have been associated with sulfonamides. Experience with trimethoprim is much more limited but occasional interference with hematopoiesis has been reported as well as an increased incidence of thrombopenia with purpura in elderly patients on certain diuretics, primarily thiazides. Sore throat, fever, pallor, purpura or jaundice may be early signs of serious blood disorders. Frequent CBC's are recommended; therapy should be discontinued if a significantly reduced count of any formed blood element is noted. **Data are insufficient to recommend use in infants and children under 12.**

Precautions: Use cautiously in patients with impaired renal or hepatic function, possible folate deficiency, severe allergy or bronchial asthma. In patients with glucose-6-phosphate dehydrogenase deficiency, hemolysis, frequently dose-related, may occur. During therapy, maintain adequate fluid intake and perform frequent urinalyses, with careful microscopic examination, and renal function tests, particularly where there is impaired renal function.

Adverse Reactions: All major reactions to sulfonamides and trimethoprim are included, even if not reported with Bactrim. *Blood dyscrasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, thrombopenia, leukopenia, hemolytic anemia, purpura, hypoprothrombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for children under 12. Usual adult dosage: 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

For patients with renal impairment:

Creatinine Clearance (ml/min)	Recommended Dosage Regimen
Above 30	Usual standard regimen
15-30	1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) every 24 hours
Below 15	Use not recommended

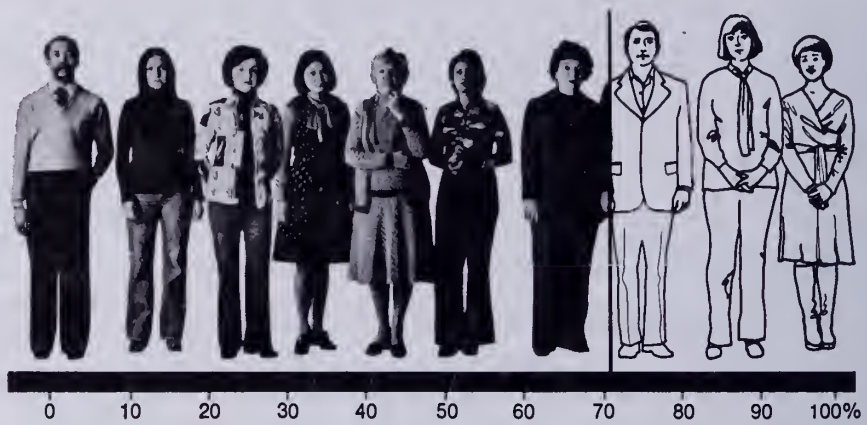
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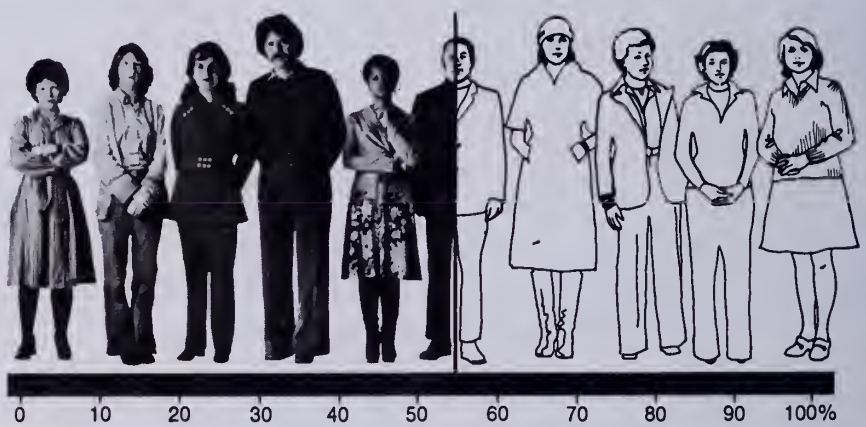
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Bactrim–70.5% of 78 patients infection-free at 8 weeks.



ampicillin–55.4% of 74 patients infection-free at 8 weeks.

*This percentage is arrived at by the statistical method of dividing the difference between Bactrim and ampicillin results (15.1%) by the percent of ampicillin results (55.4%).

†Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey 07110

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Double Strength tablets Just 1 tablet B.I.D.

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1976 KMA ANNUAL MEETING

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Louisville

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Both often



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures may require increased dosage of standard anticonvulsant medication; abrupt withdrawal may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuance (convulsions, tremor, abdominal and muscle cramps, vomiting and sweating). Keep addiction-prone individuals under careful

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According to her major
nptoms, she is a psychoneu-
tic patient with severe
xiety. But according to the
scription she gives of her
lings, part of the problem
y sound like depression.
is is because her problem,
hough primarily one of ex-
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in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

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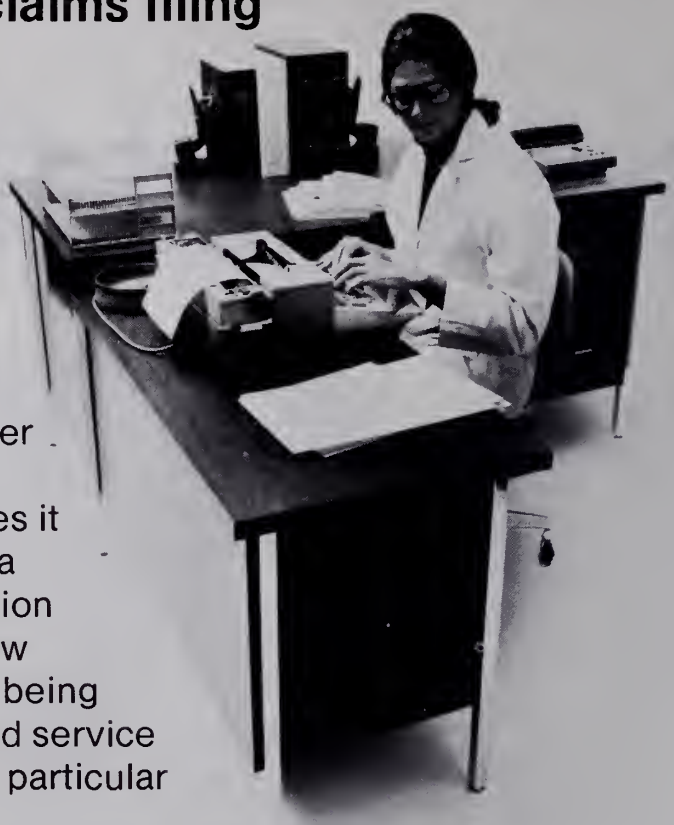
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otropics or anticonvulsants, consider
efully pharmacology of agents em-
yed; drugs such as phenothiazines,
rcotics, barbiturates, MAO inhibitors
d other antidepressants may potentiate
action. Usual precautions indicated in
tients severely depressed, or with latent
pression, or with suicidal tendencies.
Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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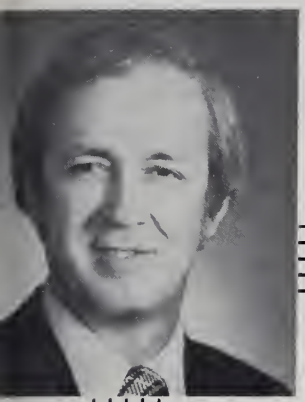
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MESSAGE FROM THE PRESIDENT



As the year of my presidency of the Kentucky Medical Association draws to a close, I wish to thank the many people who have made my job easier. The Executive Committee, spearheaded by Doctor Paul Parks and Doctor John Stewart have been immensely helpful and the Board of Trustees has been always faithful and understanding. Needless to say, the KMA Staff has been superb and the amount of work put forth by these people on your behalf is truly astounding.

There are too many items which have occurred during the past year for me to single them out individually. My report to the House of Delegates at the Annual Meeting will cover most of my activities during the past year. There are, however, a few salient points which I would like to mention in my last remarks to you.

KMA's struggle with the liability insurance crisis is passing its first phase. That is to say, the Bill has been passed and is presently in the courts testing its constitutionality. The officers of the Board of Trustees and Staff of your Association have struggled long and hard in getting this piece of legislation to the General Assembly during this past winter. And although this Bill, in our minds, is the best bill possible under the circumstances and time that it was passed, we all realize that it leaves a great deal to be desired. Further progress in the medical liability field will have to be forthcoming and plans are being made to continue the close observation of this particular subject. The solution to the medical liability crisis is not apparent on the near horizon and we, like other physicians in the country, must be vigilant and work toward some sort of permanent solution.

Recently the Kentucky Peer Review Organization was given a vote of confidence by the physicians throughout the State. You are all aware, I am sure by this time, that the vote conducted by the Secretary of HEW was in support of KPRO being the PSRO for Kentucky by a two to one majority. Certainly this should be interpreted by all concerned as approval of the physician-run PSRO in the State of Kentucky. The physician members of the KPRO Board of Directors will need your individual assistance in the management of this complex and controversial program.

The medical profession faces trying times in the foreseeable future. Our very right to practice medicine in the manner in which we have been taught is being challenged. Your aid, assistance, and understanding through the next few months and years is desperately needed by organized medicine. It is hoped that you will continue to become involved and express your desires through the KMA and AMA.

Thank you for the honor and privilege of having been your President.

David A. Shaw

POSTGRADUATE OPPORTUNITIES

SEPTEMBER

16 "The Relationship of the Pharmacist and the Physician," Speaker: R. David Cobb, President, Kentucky Pharmaceutical Association, Letcher County Medical Society, Whitesburg

26-30 KMA Annual Meeting, Ramada Inn/Bluegrass Convention Center, Louisville

26-Oct. 2 Seventh Family Medicine Review*, University of Kentucky Medical Center. **(Identical session repeated October 17-23).** Fee: $295.

OCTOBER

7-8 "Genetic Counseling for the Primary Care Physician,"** University of Louisville Health Sciences Center, Louisville

7-8 "New Methods in Tumor Localization,"* University of Kentucky Medical Center, Lexington

11-15 First Family Medicine Review,** University of Louisville School of Medicine, 50 hours Category I, Fee: $195.

20-21 "Current Trends in Allergy and Immunology,"** University of Louisville Health Sciences Center, Louisville

27 "Endoscopy,"** Louisville Area CME Consortium Health Sciences Center, Louisville

28-30 Twelfth Annual Bronson Course in Diagnostic Ophthalmic Ultrasound,** University of Louisville Health Sciences Center, Louisville

30 Kentucky Regional Meeting, American College of Physicians, Stouffer's Louisville Inn, Louisville. Contact: Franklin B. Moosnick, M.D., 184 N. Mill Street, Lexington, Ky. 40507

NOVEMBER

3 Twelfth Annual Louisville Pediatric Society Lecture, Health Sciences Center, Louisville

4-5 Tenth Annual Newborn Symposium, University of Louisville School of Medicine, Health Sciences Center, Louisville

5-7 Cancer Reading Retreat,* University of Kentucky Clinical Cancer Education Program, 13 hours Category I, Jenny Wiley State Park, Prestonsburg

17 First Annual Marion F. Beard Symposium (Hematology Related), Louisville Regional Red Cross Blood Center, Louisville

17 "Urinary Tract Infections,"** Louisville Area CME Consortium, Health Sciences Center, Louisville

IN SURROUNDING STATES

OCTOBER

1 Second Charles M. Barrett Cancer Symposium, "Lung Cancer," University of Cincinnati, Cincinnati

4-5 24th Annual Assembly, Tennessee Valley Medical Assembly, Read House Chattanooga . . . Contact: Charles Portera, M.D., 960 E. 3rd St., Suite 313, Chattanooga, Tenn. 37403.

26-27 Symposium on Urgent and Controversial Pediatric Conditions, Indiana University School of Medicine, Stouffer's Indianapolis Inn, Indianapolis. Contact: Jay Grosfeld, M.D., James Whitcomb Riley Hospital for Children, 1100 W. Michigan St., Indianapolis, Ind. 46202.

NOVEMBER

19 Fifth Symposium in Internal Medicine, University of Tennessee Hospital, Knoxville. Contact: Continuing Medical Education, Drawer 116, 1924 Alcoa Highway, Knoxville, Tenn. 37920.

DECEMBER

4-8 Clinical Convention, American Medical Association, Philadelphia

**For further information, contact: Frank R. Lemon, M.D., Associate Dean for Continuing Education, University of Kentucky College of Medicine, Lexington 40506*
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Report From KMA Cancer Committee——

Mammography: Risk-Benefit Considerations in Breast Cancer Detection*

Mammography is now widely used as part of the diagnostic evaluation of women with breast lesions of unknown nature, for the followup of women who have already had one breast cancer, and for periodic screening of the general female population. Since the method of evaluation proposed involves the radiation exposure of a large number of women of all ages to serial x-ray studies at regular intervals over an indefinite period, it is appropriate to inquire whether any risks are attendant in the widespread use of mammography. Recent studies have shown that the radiographic study of the breast may involve hazards for increasing the incidence of cancer which must be weighed against the potential benefits.

The first report of increased incidence of female breast cancer associated with ionizing radiation came in 1965.[1] Mackenzie's attention was brought to the possibility of breast cancer when a patient presented with a cancer of the right breast and with the skin showing marked radiation dermatitis. She had artificial pneumothorax therapy 15 years before for pulmonary tuberculosis and over a period of months had been fluoroscoped repeatedly. In his review of tuberculosis patients who developed breast cancer, 80% had multiple fluoroscopies and 20% had not. Of those who had prior fluoroscopies, breast cancer usually developed on the side fluoroscoped (or both if the tuberculosis was bilateral), at a younger age, more frequently as central or medial quadrant lesions, and at an incidence frequency six times that of the rest of the control female population.

During the last few years, more reports have been published substantiating the increased incidence of breast cancer associated with ionizing radiation. C. K. Wanebo, *et.al.* published information in 1968 on breast cancer among survivors of the atomic bombings of Hiroshima and Nagasaki.

Mettler, *et.al.* reported on benign and malignant breast neoplasms in women treated with x-rays for acute postpartem mastitis. The expected number of cases was twofold greater than expected compared to the general population of the region. In addition, there were also increased numbers of benign tumors. Myrden reported a series of 22 cancers in 300 patient treated by artificial pneumothorax, and four cancers in 483 cases not so treated. Grundy, *et.al.* and Cool, *et.al.* both showed very similar findings with a two- to fourfold increase in number of cases of breast cancer compared to expected frequencies in population at risk.

From these reports it was found that ionizing radiation can:

1. be associated with an increased incidence of breast cancer greater (average four times) than the general population.
2. lead to an increase in incidence of benign breast tumors.
3. cause an earlier average age of onset of the cancer.
4. have a latency period of 15-17 years after exposure.
5. correlate with the breast exposed and later breast abnormality.

A series of patients in Toronto who, during the 1940's, received pneumothorax therapy without an **increase in the incidence of breast cancer** are of interest, in that the patients were examined in the **supine** position (back to source). They averaged a dose of 17 rads and no increase in cancer was found. Patients examined **prone** (breast exposed directly) received a dose of 308.5 rads.

Dosage to the breast per mammographic study is known to be large although exposure has greatly decreased with improved equipment, films, and the introduction in some centers of xeroradiography. Tamplin and Gofman[2] in analyzing the data in the reports of Mackenzie and Wanebo, concluded that the dosage required to double the spontaneous incidence was 20-50 rads. If a skin dose of 12 rads were given in an average exam and the exam repeated every six months for 10 years, the total breast dose would be 240 rads and the incidence of cancer would be expected to be increased two to four times over the general incidence. If one accepts the published data concerning the benefits of mammography showing a decrease in cancer mortality in patients so studied,[3] it can be concluded, mammography can be safe **if** the total breast dose is not excessive.

The indications for mammography should therefore, be restricted and the dosage limited so that patients do not receive over 20-50 rads in a lifetime. It is therefore proposed that:

1. Observations should be on women over age 35 (population screening).
2. Doses should be small and repeated infrequently.
3. Radiation type and energy level should be similar or improved from those currently used in mammography (preferably Xerography).
4. Exposure should be limited to the breast.
5. Mammography should not replace a careful physical examination.

In addition to medical radiation exposure of the female breast, dose to the breast of occupationally exposed female radiation worker must also be limited. This would include both the radiological technologist and also the laboratory technologist who is exposed frequently to gamma emitting radionuclides which are handled immediately in front of her trunk.

(References on page 478)

This report was prepared by Yosh Maruyama, M.D., and John Woodring, M.D., Department of Radiation Medicine, University of Kentucky Medical Center, Lexington.

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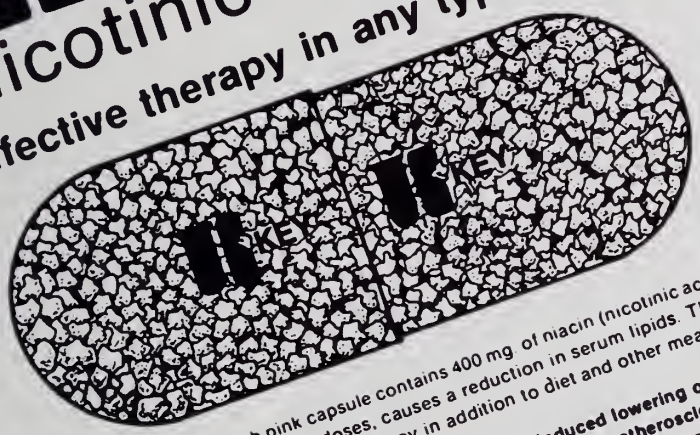
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FERENCES
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Quevauviller, Par Andre, et al.: Presse Med. 1:1480-1482, 1953
Maney, P. V., et al.: J. Am. Pharm. Assoc. 5:266-272, 1946
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Toward Rational Antipsychotic Drug Therapy: Avoidance of Multiple Dose Schedules

AARON S. MASON, M.D.*
Lexington, Kentucky

Multiple dose schedules is the most common aspect of antipsychotic drug therapy that requires attention by physicians. Change to once-a-day bedtime schedule offers many therapeutic advantages and substantial savings in medication costs.

ANALYSIS of several thousand medication schedules of antipsychotic drugs prescribed for patients in mental hospitals and mental retardation facilities and for outpatients during the past few years reveals that these drugs are not prescribed in the most effective and economical manner for a substantial number of patients. This situation exists in spite of the fact that the vast majority of psychotic patients are on an antipsychotic drug regimen, that such drugs have been widely used for over 20 years, and that they constitute the primary therapy for both acute and chronic schizophrenia. An attempt will be made to focus on the most common aspect in the art of psychopharmacology that requires comment in the light of these analyses.

It was found that frequently antipsychotic drugs are prescribed from three to five times a day for months and even years. Usually in such cases the total daily amount to be given is administered in equally divided doses. There is no scientific basis for these practices.

Antipsychotic drugs in general have a long biological half-life and their metabolism and excretion proceeds at a very slow rate. For example, a single dose of chlorpromazine may be detected biochemically in urine for up to three to four days and behaviorally for 8 to 24 hours. In view of these factors they can conveniently be given once-a-day after the maintenance dose has been determined. This is especially true after the antipsychotic drug has reached a tissue saturation level, usually after two to three weeks of daily drug administration.[1-3] Since antipsychotic drugs are slowly metabolized and have a protracted action, special slow release preparations (spansules) have not proved to have any advantage over the ordinary form of pill and are more costly.

Medication schedules analyzed reveal that most of the antipsychotic drugs were prescribed at a conservative low dosage with a lesser number in the moderate daily dosage range. Thus, a once-a-day bedtime dosage regimen could have been safely instituted for these patients. Even those on a high dosage, at most a twice a-day dosage schedule may be used as soon as the patient is stabilized on maintenance medication. When such a dosage schedule is chosen, it is suggested that a ⅓ and ⅔ division of the total daily dosage be used with the larger portion given at bedtime.

The advantages of the once-a-day (q.d) dosage given one hour before bedtime are many:[4] (1) All antipsychotic drugs have a sedating action to a lesser or greater degree. Chlorpromazine

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Received at KMA: 3-31-76

(Thorazine) and thioridazine (Mellaril), two of the most commonly prescribed antipsychotic drugs, have the strongest sedative action as a side effect. Therefore, it may not be necessary to prescribe a sedative which lessens the cost of delivery of health care and avoids possible interaction between it and the antipsychotic drug. It should be noted that the antipsychotic drugs are not good sedatives and should not be prescribed solely for this purpose. (2) Usually the patient is asleep and unaware of pharmacologic side effects that would be annoying and subjectively distressing during the day. For this reason there is less lethargy and fewer complaints of dry mouth, blurred vision, and tremor during the day. There is less impairment of mental and physical faculties and this can make the drug more acceptable to the patient, especially outpatients, and increase compliance with prescription instructions. (3) A single evening dose for inpatients is more convenient for patient and staff than divided daily doses and the considerable nursing time saved can be utilized for other therapeutic duties. Outpatients who self-medicate and families or community-placement sponsors who have to supervise the patient's medication intake find a single daily dose convenient, easy to remember, and economical. Patients are embarrassed by having to take drugs in presence of others at work or socially. They dislike having to explain why or be evasive.

Many studies have been carried out with a variety of antipsychotic drugs, comparing a multiple dose schedule with a q.d. or a b.i.d. schedule of administration. The latter schedule was included in the studies because certain investigators considered it beneficial to the patient to keep him under a limited degree of sedation during his waking hours, while others considered it to be of psychological value to give him a pill a second time. In each instance, it was documented that the single or b.i.d. dose schedule of drug administration produced clinical benefit that was at least equal to—and often greater than—that produced by a multiple dose schedule; no study has been published showing the reverse.

Even when chlorpromazine was given at a daily dose of 2000 mg the results followed the same pattern.[5] In a NIMH collaborative study half of the patients received 500 mg q.i.d.; the others received 600 mg in the morning and 1400 mg shortly before bedtime. There was no difference in the clinical benefit derived, but the patients on the b.i.d. schedule—with the large portion given in the evening—exhibited fewer side effects and rarely required antiparkinson drugs; 10 percent of the patients on the q.i.d. schedule were terminated because of side effects, while none of the b.i.d. schedule patients were terminated.

Objections have been raised against a once-a-day dosage and the principal ones are that (1) there will be an increase in side effects and (2) a single dose may be less effective than divided doses. Both of these presumptions have proven to be either false or unwarranted.[6-8] It has been found that the incidence of side effects is lower with a once-a-day bedtime dose than the same total dose given in three divided doses. To some extent the pharmaceutical industry has responded to the need of higher strength tablets of the psychotropic drugs and thus the number of tablets for patients to take at one time on a once-daily schedule has been reduced.

A study of compliance by chronic medical and psychiatric patients, ages 20 to 65, was conducted to determine how frequency of administration affected compliance.[4] The method used was a count of pills remaining in a container and tactful interrogation of patients about their medication consumption. At the end of one month the compliance of patients taking divided doses of a single drug was: q.i.d.—70% failed to take 25 to 50% of the prescribed dose; t.i.d. p.c.—60% failed to take 25 to 50% of the prescribed dose, b.d.—30% failed to take up to 25% of the prescribed dose; and q.d.—7% failed to take up to 20% of the prescribed dose. There was no difference between medical and psychiatric patients, nor did side effects play a major role in noncompliance. It is, therefore, evident that there is greater adherence to a once-a-day schedule than a multiple dose schedule.

Many clinicians now start their patients with a single bedtime dose regimen. In the occasional patient who reacts with restlessness or insominia, the bulk of the daily drug dosage may be given in the morning instead of at bedtime. Exceptions to the q.d. schedule may be the elderly and physically infirm who cannot detoxify these drugs as rapidly and require them to be given at lower daily doses in smaller units and more often. Multiple dose administration is certainly justified in the treatment of the acutely disturbed patients until their key or target symptoms are brought under control.

The administration of the total daily dosage on a q.d. or b.i.d. schedule allows for the use of proportionately less expensive size tablets with a considerable potential in savings. It is less costly because the cost of the drug is not directly proportional to the amount of active medication in a tablet.

Table 1 gives a price range of chlorpromazine tablets and it can be noted that it costs less than twice as much to give 10 times the active medication (10 mg vs 100 mg) and exactly twice as much for 20 times medication (10 mg vs 200 mg).

Table 1
PRICE RANGE—CHLORPROMAZINE*

Tablet Size	Cost/tablet
10 mg	3.1¢
25 mg	3.6¢
50 mg	4.2¢
100 mg	5.1¢
200 mg	6.2¢

In Table 2 the cost of a 400 mg daily dose of thioridazine is used as the example. The data shows that the cost of the same amount of this medication may vary from 35¢ to $1.45 per day, depending upon the tablet sizes that are prescribed. Furthermore, if a patient was treated with the first regimen (four 25 mg tablets four times a day), he would have to swallow 16 tablets compared to two tablets if he were on the last regimen listed (one 200 mg tablet twice a day or the two tablets at bedtime). The greater number of tablets a patient is required to take the more likely he is to deviate from the prescription instructions—thus ingesting less medication than is prescribed, and potentially, therefore, causing a return of symptoms, relapse, and rehospitalization.[9]

At one of the state hospitals in Massachusetts several years ago a study showed that by merely switching the directions and strength sizes of outpatient prescriptions, the hospital would save over $7,300 a year in drug costs.[10] Furthermore, there was an average savings of about $4.00 per prescription, if the patient purchased the drug in a retail pharmacy.

Table 2
COST OF MEDICATION

(400 mg daily dose Thioridazine) with varying dosage units*

Prescription Schedule	Daily Cost
(Tablet size)	
4 (25 mg) q.i.d.	$1.45
2 (50 mg) q.i.d.	79.2¢
1 (100 mg) q.i.d.	46.4¢
1 (100 mg) + 2 (150 mg)	42.2¢
1 (100 mg) + 1 (100 mg & 200 mg)	37.3¢
1 (200 mg) b.i.d.	35¢

*The cost figures in Table 1 and 2 are from the 1976 Drug Topic Red Book published by Medical Economics Co., Oradell, N.Y. They are average wholesale prices when purchased in 1000-tablet quantities by retail pharmacies.

Cost analysis of 100 outpatients on antipsychotic drugs followed by several mental health centers in Kentucky disclosed that there would be an annual savings of $3,094 if they were placed on a once-a-day medication schedule.[11] An analysis of 365 patients on the rolls of a comprehensive care center indicated that an annual savings of $11,470 would ensue with a similar change in the medication schedules (as in Table 1 and 2, the calculations were based on the wholesale price guide for pharmacists).

When consideration is given to the thousands of inpatients in psychiatric and mental retardation facilities and the outpatients receiving antipsychotic drugs across the country one can surmise the enormous potential savings to patients and taxpayers if the following basic principle were followed: after the first week or two or as soon as the patient has been stabilized on the lowest effective maintenance dose, the drug should be administered once or at most twice a day.

Acknowledgement

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Renal Carcinoma-Experience at the University of Louisville Hospitals†

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The experience with renal cell carcinoma at the University of Louisville primary teaching hospitals is reviewed and contrasted with current literature and physiologic speculations as to the mechanism of associated secondary effects.

ADENOCARCINOMA of the kidney accounts for 1.2% of all cancer and is one of the most interesting tumors from the point of view of symptomatology and prognosis.[1] A 20-year review (1954-1974) of patients with this disease at the Louisville General Hospital (37 cases) and Louisville Veterans Administration Hospital (35 cases) was undertaken to compare these cases (Table 1) within a particular geographic region with those in published reports.

Table 1

HOSPITAL	NUMBER: MALE — FEMALE		MEAN AGE
Louisville General	24	13	56
Veterans Administration	35	0	57
TOTAL	72		

Review and Results

In the literature, the incidence of hypernephromas in premenopausal women equals that of men, but after menopause it is only one-third the incidence in men.[2] The tumor is rare before the age of 30. At General Hospital nine patients were under the age of 50; seven were men. Of the total of 37 patients, 24 were men and 13 women, a 2:1 ratio. The youngest patient was 17 years old and the oldest was 85: the average age was 56. The average age at the Veterans Hospital was 57 years; 11 of those 35 patients were less than 50. No women were included.

The etiology of the tumor is unknown. Smoking has been implicated as a causative factor[3]; half of our patients were known cigarette smokers (10 of 72 were known non-smokers); for the remaining patients the information was not available (Table 2). This does not differ from the norm for adult Americans. Lead[4] and estrogens[5] have been suggested as potential carcinogens in animal experiments, but it was not possible to review whether our patients had exposure to these substances. No racial differences are reported in the literature. Two-thirds of patients with Hippel-Lindau's disease will develop the kidney tumor[6]; no patient in our series had this disease.

Table 2

	SMOKING HISTORY VAH	LGH	TOTAL
Smoker	23	14	37
Non-smoker	3	7	10
Unknown	9	16	25

The natural history of carcinoma of the kidney is believed to include a long pre-invasive state of 13 to 20 years as in carcinoma of the cervix.[7] Occasionally the tumor remains inactive, and a silent carcinoma in elderly men is not uncommon (Table 3). Five of 72 patients (7%) in our series had Stage I carcinomas found incidentally at autopsy in asymptomatic men with an average age of 77 years.

As reported in the literature, the active tumors metastasize via the intrarenal veins and lymphatics to the lungs (50%), bones (33%), and liver (32%).[8] Of those patients in our series with metastases, the sites involved were the lungs in 67%, the liver in 35%, the bones in 29%, the adrenals in 29%, and the heart in 21% (Table 4).

The signs and symptoms of cancer of the kidney can be classified under three headings: local effects, toxic systemic effects, and endocrine effects (Table 5). In our series 52% had hematuria, 50% had pain, and 3% presented with an acute left variococele.

Among the toxic systemic effects reviewed, 8% of our patients presented with a history of fever. The association between pyrexia and malignant renal tumors was at first recognized by Stetter in 1887[9] and has since been referred to as fever of

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Table 3
FIVE PATIENTS WITH SILENT ADENOCARCINOMA OF THE KIDNEY DISCOVERED AT AUTOPSY

PATIENTS	AGE	PRIMARY CAUSE OF DEATH
1	85	Pneumonia
2	70	Gunshot wound
3	84	Cerebral vascular accident
4	75	Cerebral vascular accident
5	70	Cerebral vascular accident
MEAN AGE	77	

unknown origin. Although necrosis or infection may be apparent etiologic factors in some patients, the cause of the fever when these are absent has been thought to be a pyrogenic substance formed by the tumor.[10]

The association between hypochromic anemia and renal cell carcinoma varies from 29 to 88%.[11,12] In our experience the incidence was approximately 18%. Anemia associated with renal tumors may be the result of hematuria. However, the correction of anemia is directly related to removal of the renal tumor in some instances. Therefore the anemia is reasonably attributable to depression of erythropoiesis.[13] As in anemia of chronic renal failure, an erythropoietin deficiency (from destruction of renal tissue) in addition to bone marrow depression may be present as part of a tumor-toxic effect. The association between both benign and malignant renal lesions and erythrocytosis is now well recognized. Measurement of erythropoietin in malignant renal lesions has indicated that erythremia is mediated by an increase in the erythropoietin-like substance produced by the tumor.[14] Only 7% of our patients had a hemoglobin of 16 gm% or more.

The recent description of hepatopathy associated with renal tumors has been characterized not only by the absence of metastasis but also by the reversal to normal function after the tumor has been removed. The phenomenon was first reported by Stauffer,[15] who coined the term "Nephrogenic hepatosplenomegaly." The pathogenesis of these abnormalities remains uncertain. The usual explanation has been that the tumor produces a toxic substance that affects the liver.[16] An increased lysosomal enzyme activity has been observed in liver tissue from patients with renal carcinoma without metastasis, and it has been suggested that either the lysosomal enzymes are released by the tumor and taken up by the liver lysosomes or that there is a flow of macromolecular metabolites from the tumor that causes enhancement of lysosomal enzyme synthesis.[17] Recent in vivo and in vitro studies in our laboratory indicate that the increased biochemical activity is directly related to the release of enzymes by the tumor into the blood stream.[18]

Table 4
METASTASES IN RENAL CARCINOMA

Literature[8]		Louisville	
Lungs	50%	Lungs	67%
Liver	32%	Liver	35%
Bones	33%	Bones	27%
		Adrenal	29%
		Heart	21%

An association between renal tumors and hypertension has been recognized for many years; however, a diastolic pressure greater than 100 mmHg was present in only 3% of our patients. The possibility that some renal tumors secrete a pressor substance either directly produced by the tumor or secondary to ischemia from the compression effect on the renal arteries has been discussed in detail.[19]

The association of hypercalcemia with renal carcinoma is most commonly attributable to the presence of osteolytic metastases causing hypercalciuria and eventually hypercalcemia.[20] Hypercalcemia was present in three of our patients with multiple metastases. Hypercalcemia resulting from renal cell carcinoma without evidence of bony metastasis was first recorded by Albright-Reifenstein.[21] A hyperparathyroid-like hormone substance directly released by the tumor or binding and releasing calcium into the plasma in excessive amounts may be the cause.

Table 5
ENDOCRINE, TOXIC AND LOCAL EFFECTS OF RENAL CARCINOMA IN 72 PATIENTS

LOCAL	
Hematuria	52%
Pain	50%
Variococele	3%
TOXIC	
Fever	8%
Anemia	18%
Hepatopathy	0%
ENDOCRINE	
Erythrocytosis	7%
Hypertension	3.3%
Hypercalcemia	5%
Feminizing hormones	1.5%

One of our patients presented in a near-terminal state with gynecomastia and hematuria. One case in the literature presented in a similar fashion; work-up demonstrated increased secretion of gonadotropins.

The over-all five-year survival has been estimated at 33-48%.[22-24] At Louisville General Hospital the crude five-year survival rate for 25 pa-

Table 6
5-YEAR OVER-ALL SURVIVAL RATE

	Alive	Total	%
LGH	8	25	32%
VAH	6	15	40%
TOTAL	14	40	35%

tients was 32%, and at the Veterans Administration Hospital for 15 patients it was 40% (Table 6). At LGH only 11 of 27 cases presented during this period as Stage I or II (locally confined) disease. In this sense, the experience is much like that described by Baughman and associates[25] for carcinoma of the large bowel in the same hospitals reviewed here. The basic method of treatment was surgical removal of the tumor with only a selected few patients receiving radiotherapy.

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Fatal Hypothyroidism Following Treatment of Graves' Disease: A Preventable Complication†

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Lexington, Kentucky

A case report of fatal hypothyroidism following radioactive iodine therapy is presented. Suggestions are made for prevention, including medical warning tags.

SINCE World War II, the therapy of hyperthyroidism has been revolutionized by the introduction of antithyroid drugs and radioactive iodine (RAI). Treatment with RAI is simple and effective.[1,2] Although grave complications were feared, it is reassuring to the therapist that in the 30 odd years since its introduction there have been virtually no serious complications except hypothyroidism. Malignancy in the thyroid gland or elsewhere has not materialized[3,4] nor has genetic damage been documented in the case of children or young adults treated in the reproductive periods.[5,6] Hypothyroidism, on the other hand, originally thought to be a finite complication of the first year or two following treatment with RAI, has now been recognized as a delayed manifestation in a steadily increasing number of patients many years later.[7,8] This delayed hypothyroidism is a definite hazard to health and even life in patients who fail to return or who are lost to medical follow-up for some other reason. The education and identification of patients receiving RAI therapy, for hyperthyroidism, is therefore a prime responsibility of the clinicians involved in the treatment.

Case History

A 54-year-old married woman was admitted to the University of Kentucky Medical Center in April 1975. She had been remarried in recent years and her name changed. It was, therefore, unknown to the attending physicians that she had been treated in March 1964 with RAI for Graves' disease associated with mild exophthalmos and diffuse hyperactivity of the thyroid gland. At that time, she received 8 millicuries of ^{131}I. Subsequently, her hyperthyroidism improved and she was euthyroid when last seen in April 1966, two years following treatment. She did not return to clinic and was lost to follow-up.

She was admitted under her married name to another hospital in June 1973, January 1974, and July 1974. She had a history of alcohol abuse and was thought to have alcoholic brain disease, liver disease, and possibly heart disease. These were thought to account for her illness.

On admission to UKMC, she was stuporous, disoriented, and dehydrated. She showed mild residual proptosis. Her skin was dry and flaky, especially over the extremities, but also over the abdomen. She was hypothermic (94°-95°F.).

At first, the diagnosis of alcoholism with complications was accepted by the attending physicians; however, the hypothermia suggested hypothyroidism and her old record under her previous name was obtained showing that she had received ^{131}I therapy. Serum thyroxine level was 2.6 ug/dl (5.0-11.5), TSH was 16.6 uU/ml (3-11). She was started on oral thyroxine but 10 to 12 hours after the administration of the first dose, she expired. Autopsy showed fatty infiltration of the liver and minimal brain lesions. No potentially lethal lesions were found other than absence of functioning thyroid tissue with fibrosis typical of that seen following radiation therapy.

Discussion

Radioactive iodine therapy is an effective, simple, painless, and economical treatment for hyperthyroidism.[1,2] As such, it represents an improvement over surgery which is the alternative when definitive treatment is needed. While most of the complications of radiation therapy which were originally feared have not been realized, hypothyroidism is real and common. This condition may eventually develop in 50% or more of the patients receiving RAI.[7,8]

This frequent, severe, and sometimes insidious,

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complication of radiation therapy requires that the treating physicians warn the patient in very clear terms: that he or she will probably become hypothyroid and under no condition should he or she fail to have a thyroid function test at least annually for the rest of their life. The hypothyroid condition, when recognized is simple to treat and usually offers no serious problem either in diagnosis or management.

The vagaries of patients' memories, and, sometimes of the education process are such that every possible form of insurance should be taken to make sure that the patients' thyroid status is followed. For this reason we suggest that, at the time of administration of RAI, the patient be asked to apply for a medical emergency bracelet or necklace with the inscription that ^{131}I therapy has been received with dose(s) and date. We hope that this would serve as a second safety measure to remind the patient and any subsequent examining physicians of possible development of hypothyroidism.

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Alcoholism Treatment in Clinical Practice

KIM A. KEELEY, M.D., M.S.H.* AND MARC GALANTER, M.D.**

CAN the primary care physician diagnose and treat alcoholism? Does a family doctor routinely know what to do when he encounters this disease?

In this age of accountability, many professionals and laymen who work in the area of substance abuse have openly expressed their skepticism about the physician's willingness and ability to have an impact on alcoholism.[1] At a recent conference in Louisville,[2] medical school faculty presented information about the effectiveness of modern alcoholism treatment programs which involve the doctor. In his closing remarks, the physician moderator, unconvinced, reaffirmed the difficulty most physicians have in coping with their alcoholic patients. In effect, he said the new information from the medical school faculty was not useful to the practicing physician.

This article has two purposes: (1) to stimulate interaction between medical school faculty and physicians in private practice, regarding the topic of alcoholism; and (2) to indicate three therapeutic principles which can be integral parts of the physician's therapeutic program for alcoholics.

As a general rule, it can be said that the physician who finds that alcoholic patients take up too much of his time, is probably doing something wrong. However, even in emergency rooms where staff often complain that alcoholics take too much of their time, the data have not supported this view unless patients who are more apt to die are included.[3] Those with alcoholism who are brought in dead on arrival are significantly more likely to have visited the emergency room at least once within six months of death. Similar findings apply to drug abusers and psychiatric patients who died, but not to those with lethal accidents or medical and surgical catastrophes.

The evidence suggests that alcoholism goes unrecognized, even in family practice situations directed by medical school faculty. Of almost 2,800 adult patients seen on a regular basis at a family practice clinic in a university setting, only 19 had the diagnosis of alcoholism listed on their problem-oriented records.[4] This is far below the 195 cases which would be expected if the nationwide rate for alcoholism applied to this clinic roster.

Under the direction of one of the authors, a group of medical school faculty from around the country have outlined a short continuing education program about alcohol problems in clinical practice (Table 1). The next section of this article is based on this program and describes three crucial areas which these faculty suggest are critically important in the management of alcoholism and other substance abuse.

As a general rule, specialists in alcoholism hope that treatment personnel will have competency in: (1) early identification of the illness, (2) detoxification, and (3) long-term management. Little data has been accumulated to demonstrate the effectiveness of these principles in private practice. For this reason, gathering the comments and opinions of the practitioner regarding how feasible these principles are, is an extremely important function. The authors hope that interested physicians in private practice will write to them about difficulties they perceive and experience in applying these ideas to the treatment of alcoholism. We would be glad to prepare a publishable article about their responses in collaboration with our colleagues in private practice. No matter who is author of the report, we believe their responses are absolutely essential for progress to be made.

Early Identification

Early detection of alcoholism is often difficult

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in our society because the use of alcohol is so widespread. Therapists who are teetotalers have no natural advantage when it comes to identifying alcoholism. In fact, random samples of a general population suggest teetotalers and heavy consumers of alcohol are more likely to experience stressful life events and impairing psychiatric symptoms.[5] The fact is that even those who drink minimal or moderate amounts are conditioned to think that alcohol use is responsible for problems only when major disruptions of social support systems occur—separation or divorce, job loss, arrest, and unusual or deviant behaviors.

The antecedents of these disruptions in the social support system are often difficult to identify, and patients do not always agree when their therapists draw attention to what may be preliminary signs of personal and social deterioration. At a time like this, few of us are willing to argue with our patients, and that certainly is not to be recommended. On the other hand, suitable alternatives to arguing with our patients appear to be few and far between. Unfortunately, this is a truism which is too often used to rationalize the therapist's passivity in the face of alcoholism.

It is likely that most physicians recognize the danger that excessive use of alcohol carries for their patients. Rather than argue with such patients, and rather than be totally passive and accepting, the physician should develop his capacity to do three things: (1) take a drinking history in a non-judgmental manner, (2) identify and agree upon a label which best describes the patient's emotional response to alcohol use, and (3) explain briefly the way in which the physician's view of alcohol abuse differs from the patient's without requiring the patient to agree with the physician.

These three skills are essential to the process of early identification of alcoholism. Except in rare instances where other approaches have failed, the therapist must bend over backwards to avoid being pejorative and judgmental. The physician's personal insight and maturity should help him to acknowledge that his own expectations and feelings will sometimes make him appear to be judgmental and overly authoritarian. This happens to everyone, including the specialists. Usually the best way to undo this turn of events is to say, "I'm sorry," acknowledge the misstatement, and start over again.

When these skills are mastered, the therapist has a chance to notice two indicators of early alcoholism which are often missed. First, these patients are often quite preoccupied with their alcohol use. The mere mention of it by the physician often produces a stream of conversation where the patient seeks to justify his substance use and defends himself against further inquiry. In professional terms, they are said to have a high number of "associative responses" when questioned about alcohol.

Second, these patients are likely to have experienced episodic transient inability to conform to their usual behavior patterns at work, home, or recreation. From time to time the patient, his family, or his job colleagues may report these unusual absences or changes in routine that seem uncharacteristic for the patient. More often than

Table 1.

OUTLINE OF CLINICAL POINTS IN THE MANAGEMENT OF ALCOHOL AND DRUG ABUSE

1. **Diagnosis**
   a. **Initial history** should include specific questions about alcohol and drugs. Use tact, as with a sexual history.
   b. **Index to suspicion** should be high because of patient's denial. Pick up on: passing mention of drugs, bars, unexplained decline in social function, gaps in time, accidents.

2. **Detoxification**
   a. **Long term on-going treatment starts** here and is oriented around abstinence from alcohol.
   b. **Expect sequellae,** including previously masked symptoms such as depression, grief over loss of the drug, anxiety and craving.

3. **Long Term Treatment**
   a. **Family involvement** is invaluable both for obtaining a valid history and therapeutic allies in the future.
   b. **Alcoholics Anonymous** or similar groups for drug users are invaluable adjuncts. Disulfiram should be considered.
   c. **"Acting out"** and behaviors which disrupt therapy may occur in exaggerated form. Because of this, the therapist should play an active and directive role even though he is ordinarily willing to let the patient call the shots.
      1. **Recurrent drinking** is often seen because the addictive process takes time to resolve. Every slip of this type should be fully explored in a dispassionate way so that the patient may come to understand and control this phenomenon.
      2. **Organicity** may also be the cause of behaviors that are mistakenly thought to be psychogenic.

not, these are explained away as minor inconveniences in daily life. The perceptive observer should inquire closely about these events, since they frequently are associated with alcohol use. Either the patient is using his time to consume his substance of choice, or he is experiencing the confusion or sedation which come with substance use that exceed his tolerance.

Detoxification

Detoxification is another major concept which applies to the private practice treatment of alcoholism. No matter where or when it is accomplished, detoxification should occur in a supervised setting where the physician knows that access to alcohol is not possible. Often this is a helpful experience to the patient, since he may not believe that he can get along without alcohol.

Detoxification is an old concept which has been modernized. Many general hospitals and other centers are now devoting several beds to this purpose, something that was relatively rare five and ten years ago. This has happened because of the increasing awareness among professionals about the debilitating effects of continued dependence on substances. Interrupting this dependence is of crucial importance in every case, and admission to a detoxification facility is often the only way to accomplish this.

In no way should the physician, the patient, or the patient's family and colleagues look on detoxification as a short-term cure for what is essentially a long-term illness. Even patients whose drinking is a direct response to a major life-stress, such as death of a spouse, continue to struggle with the temptation to use alcohol after the stress is long past. Detoxification is only one phase of the long-range therapeutic process that helps disengage the patient from the substance he is using.

Popularized concepts of medical versus non-medical detoxification have introduced a confusing distinction to this aspect of alcoholism treatment. A physician should always be involved in the detoxification of the alcohol dependent person, but that involvement need not always be direct and personal. Even "non-medical" detoxification programs are expected to have doctors on call in case of unexpected events in the withdrawal process. Under ordinary circumstances physicians at detoxification centers quickly triage those patients who require intensive medical care and refer them to a general hospital setting. Such patients may be transferred to the less intensive environment of the detoxification center once their acute medical problems have been successfully treated.

While it is often the practice to admit patients with substance abuse to a general hospital for detoxification, it could actually be counter-productive to do so. This is because the general hospital ordinarily does not provide the kind of alcoholism treatment activities and the specialized staff-patient interactions which are available at the detoxification center, and which continually emphasize the need to interrupt the substance abuse. Admission to purely psychiatric hospitals are often equally counterproductive because the focus is on mental illness rather than on substance abuse. In either case, the patient has encountered a treatment environment which may not be geared to his own needs and which often leaves unattended the necessity for stopping the use of alcohol.

Once a physician has admitted a patient to a detoxification center, many of the therapeutic procedures can be managed by nurses, alcohol counselors, and other non-medical professionals. These procedures allow the vast majority of patients at detoxification centers to avoid serious withdrawal symptoms without requiring intensive hospital care. In well run programs, delirium tremens is a rarity.[6] While the acute detoxification may require approximately five days, residential treatment allows the patient to extend his drug or alcohol-free experience to 30 days or more. The thrust of detoxification is to begin an alcohol-free period in the patient's life which can be continued once the patient is discharged. It may afford the therapist his first opportunity to demonstrate to his patient that abstinence is possible.

Detoxification usually is associated with the appearance of many new symptoms and concerns, especially those for which alcohol was used, consciously or otherwise, to provide relief. Anxiety, grief, hostility, and feelings of inadequacy are more easily mobilized when the depressant activity of alcohol is no longer available. The appearance of the symptoms can catch off-guard the therapist who hoped that the detoxification center would solve all his patient's problems. They can be overwhelming for the therapist who believes that he can treat alcoholism all by himself without the assistance of other professionals. Most patients can learn how to handle these very human emotions, if only they do not dull their

senses and their abilities with alcohol and drugs.

Whether it lasts 3 days or 30 days, detoxification has abstinence as its primary goal. Only the abstinent patient can hope to deal effectively with his normal human emotions, and physicians must keep this in mind rather than get discouraged by a patient's increased awareness of his many problems. The doctor should be prepared to mention those other treatment and resource personnel he wishes to call upon when the patient becomes aware of the problems which alcohol has helped him to evade.

Long-Term Management

As the patient's awareness about himself increases and as the detoxification process comes to an end, the physician comes face to face with the third important concept in the modern treatment of alcoholism—the need for long-term therapeutic strategies. Primary care physicians, or any doctor, for that matter, need not intensively involve themselves in a long-term treatment program for alcoholic patients. However, the minimum expectation is that they monitor the continuity of care. Physicians should make sure that long-term treatment strategies are being carried out.

A major criterion for improvement among alcoholic patients will be increasingly longer periods of abstinence. Recurrent and brief episodes of alcohol abuse should not discourage the patient or his therapist when the record of increasingly longer periods of sobriety remains intact. Few, if any human beings, are able to stop doing something pleasurable once and for all, even though it may be detrimental to their health.

Many investigators, including Steinglass[7] and Davis,[8] emphasize the importance of the circumstances surrounding the ingestion of alcohol and the use of drugs. The physician who takes a brief but careful inventory of the situations where his patient finds himself drinking, is much more likely to see how the altered state of consciousness brought about by alcohol acts as a "reward" to the patient for avoiding painful and troublesome relationships. Prolonged exposure to such a system of "rewards and punishments" has devastating effects on families, as pointed out by Davis and many others.

The family becomes molded in such a way that the alcoholic, the "identified patient," becomes a scapegoat for all other family members. The professional who does not recognize this, or who merely recognizes this without mentioning it to the family, is quite likely to be discouraged and disappointed once the detoxification phase of treatment is completed. He should not be expected to re-mold or re-sculpt the family into more appropriate roles, but he should recognize the need for this type of therapy. Qualified pastoral counselors, family therapists, and self-help groups such as Al-Anon and Alateen are willing to work with families to accomplish these goals. They are so available and so easily called upon for help these days that any member of the physician's staff could handle the referral.

Alcoholics Anonymous is the best example of a group which is ready and able to cooperate with the physician. Ordinarily there are several members in any one chapter who are willing to work almost on a moment's notice with patients and families referred by physicians. The array of intervention strategies provided by Alcoholics Anonymous and its companion agencies, Al-Anon and Alateen, can often serve as the principal treatment method during this long-range management phase.

From time to time families and clients are reluctant to become involved with Alcoholics Anonymous. Any number of objections can be raised, and a certain tolerance should be exercised when this happens. While the physician would be well advised not to break away from his insistence that some help from other sources like AA is probably going to benefit his client, there is usually no great advantage in insisting that it be done on a crash basis. The patient must develop his own therapeutic resources at this stage of treatment, and some are able to do this more quickly and efficiently than others. The minimum recommendation would be to tell the patient that his reluctance may be a type of denial and resistance to the diagnosis of alcoholism. This way the patient will recognize that his doctor does not wholly agree with a negative assessment of Alcoholics Anonymous.

The important thing is for the physician to express a continuing interest in the progress his patient may or may not be making with these other therapists and agencies. If the patient feels that his physician has forgotten about making a referral or that the doctor is no longer interested in the substance abuse problem, his relationship with the physician and the referral agency are both undermined, and a recurrence of symptoms is quite likely. The physician would be well advised to identify one or two people in other agencies who would be willing to accept individual and family

referrals. This adds a personal dimension to the referral process, and should the physician need to corroborate the patient's reports about the referral agency, the physician or his staff might call this person directly.

The main theme of long-term treatment is to maintain the interruption of the alcohol dependence which was begun during the detoxification phase. If this can be done, most patients and families have a chance while working with M.D. and non-M.D. personnel to cope with the underlying tensions that led to the alcohol dependence. The physician should see himself as taking charge over the substance abuse activities of the patient, much like he would for a diabetic patient who abuses his diet or a patient with fractured limbs or arthritic joints who abuses his tolerance for activity. Other aspects of care can be left to referral agencies, non-M.D. personnel, and to the family and patient who are now, it is hoped, usually but not always free of alcohol dependence.

Remissions almost certainly will occur, just as with most other diseases that doctors treat. However, they should not be taken for granted. Consciously or unconsciously, patients and families often want to challenge the advice they are getting. Patients will wonder if therapeutic strategies really do have to be long-term in nature, just like they used to wonder whether the diagnosis of alcoholism correctly applied to them. This is reminiscent of the anger phase identified by Elizabeth Kubler-Ross among the terminally ill.[9] Such reactions are not a willful testing of the physician's clinical acumen. Drinking patients consciously argue about their doctor's diagnosis while they unconsciously struggle to assimilate the notion that alcohol in any amount is not good for them. Nor do people return to alcohol just to make their physician look bad. No matter what his educational background, each time a therapist discusses the goal of abstinence in a non-judgmental and dispassionate manner, he assists his patient in coming to grips with the reality of alcoholism. Learning experiences such as this are essential to modifying any drug dependent behavior.

Diminished ability to learn from experience and to benefit from modern treatment techniques is often manifested by recurrent drinking. When this happens, there should be a review of the treatment strategy to make sure it is appropriate to the patient's circumstances. Patients who have used alcohol excessively over an extended period often have subtle signs of organic brain disease which interfere with their capacity to follow a treatment regimen. Their alcohol use has predisposed them to follow older and more fixed behavior patterns, including drinking. Highly structured environments are often required to modify the behavior of this relatively small group of alcoholics.[10]

A minimum of one year of sobriety should be required by the physician before he will discharge the patient from his care. However, the patient should understand that even though his medical care for alcoholism has stopped, the nonmedical aspects of his care should be continued. They function in a preventive manner, helping the patient and his family to maintain abstinence and improve their ability to handle tensions via effective psychological and social support systems rather than by substance abuse.

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EDITORIAL

Hench and Henchmen
The Last Four Days of September

BY the time you read this, you may be tardy but not too late in arranging to attend the 126th KMA Annual Meeting. The first meeting, held in Frankfort in 1851, was attended by 39 physicians and this year in Louisville 1500 physicians are expected, about one half of our total membership. Don't you be the half left out or left behind!

The director-producer (Chairman Richard F. Hench, M.D.—KMA staff) of this extravaganza (Scientific Sessions) and his "Hench-men" (Scientific Program Committee) have worked hard (far into the night) and long (since December 1975) to provide a timely and informative program (see page 418 in the August issue) just for (if you have paid your 1976 dues) you. There are 25 prominent and outstanding guest speakers including such stars as Henry J. Heimlich—and if you often eat out, you may be your hangout hero if you know the Heimlich maneuver. "Breast problems" will be uncovered, "Cat Scanning" may not be exactly what you think, "Intentional Burning" will kindle your interest and Marty Raff will fly through and clear the confusion about swine flu and other flu viruses. There will be "Shock Lung," "Urinary Diversion," "Tetanus in Kentucky," the "Estrogen Therapy" controversy with Keeney giving us the latest word in "Ultrasound." All of this and there is more with 17 specialty group meetings and all approved for continuing medical education. Get your Category I credits here!

Other really big shows include 80 scientific and technical exhibits, the installation of Paul J. Parks as our President, and no one should miss (pro of the professionals) J. Ed McConnell's "Kentucky—My Kentucky—Fifty States in the Bicentennial Year" at the President's Luncheon. KEMPAC will turn their spotlight on distinguished guest speaker, Richard M. Scammon, Ph.D., on Monday night and the business and policy-making side of the annual session is also ever-present through meetings of the Executive Committee, Board of Trustees, Reference Committees, and House of Delegates. See and be seen; make your wishes known!

Aside from the medical activities there is pleasant respite about town in such features as sightseeing tours of Louisville with bus pick-up daily at many Louisville inns and hotels. There are guided tours of Churchill Downs and steamboat excursions on the beautiful Ohio River aboard the Belle of Louisville are available each afternoon. There are regularly changing exhibits at the J. B. Speed Art Museum, open daily except Monday. The local newspaper will keep you posted on places to dine, amusements, and the activities on the Riverfront Plaza-Belvedere.

Have fun! DM

See ya! JSL

FROM THE EDITOR'S NOTEBOOK

Notes of medical and professional interest from a cross-section of America's journals.

Napoleon Bonaparte—Dysuric Defeat

If you missed the 70-minute documentary "Napoleon: The Man on the Rock" you missed one of the better PBS-TV presentations. It retraced Bonaparte's path into exile from Waterloo in 1815 to his death in 1821 on the island of St. Helena.

Will and Ariel Durant in the The Age of Napoleon (Simon and Schuster) tell of Napoleon's last days and of his autopsy. Two days prior to his death he received a large dose of calomel which resulted in loss of consciousness and hemorrhage in the gastrointestinal system. He died on May 5 and an autopsy was performed on May 6: "The autopsy revealed at once the chief cause of Napoleon's suffering: cancerous ulcers in the pylorus. One ulcer had eaten a quarter-inch hole through the stomach wall, spreading putrefaction. The bladder was small, contained several small stones; this, and a malformed left kidney, probably caused the Emperor's need for frequent urination, and may explain a certain inconstancy of attention to the course of battle at Borodino and Waterloo. None of the examiners reported any signs of syphilis, but the genitals were small and apparently atrophied." Napoleon was 52 years old when he died.

How Do Your Arteries Harden?

"Many factors influence the occurrence, distribution, and evolution of the arterial lesions which characterize human and experimental arteriosclerosis," writes George M. Hass, M.D., in the March 1976 issue of *Modern Concepts of Cardiovascular Disease*. In the summary of his article, "Relations Between Human and Experimental Arteriosclerosis" three factors were emphasized: (1) hyperlipidemia; (2) some obscure factors that are responsible for production of chronic, progressive calcific degeneration of arteries; and (3) the variable reaction to stress." Doctor Hass, from the Department of Pathology at the Rush-Presbyterian-St. Luke's Medical Center in Chicago states, "Each of these three factors, alone or in dual combination, was innocuous. Together, however, they often produced generalized calcific atheroarteriosclerosis with thrombosis, the incidence of which seemed to be mediated by genetic factors."

In the July issue of *Annals of Internal Medicine,* E. H. Ahrens has an interesting article entitled, "The Management of Hyperlipidemia: Whether, Rather than How." He encourages us to screen routinely for hyperlipidemia (Doctor Hass's factor number one) and to use our own judgment "whether to treat this finding after weighing the family history of premature coronary heart disease and coincidence of other risk factors, and then to institute with vigor and conviction those measures needed to optimize body weight and general physical fitness." He mentions such measures as the low cholesterol, low-saturated, high-polyunsaturated-fat diet, moderate alcohol intake and supplemental use of drugs such as clofibrate, nicotinic acid and cholestyramine. But Doctor Ahrens concludes discouragingly with the statement that "there is no clear proof that these measures will prevent or even retard the progress of atheromatous disease."

I was a bit encouraged by Doctor Ahrens mention of moderate alcohol intake but back to Doctor Hass who adds to my increasing perplexity: "The occurrence of this arteriosclerotic process was enchanced by impairment of hepatocellular function and prevented by adrenalectomy. Therefore, there is some experimental evidence that calcific medial degeneration of ageing arteries, so essential to development of the usual forms of human arteriosclerosis, may be caused by neuro-endocrine regulation of hepatoadrenal mediation of the action of the Vitamin D in the distribution of calcium and on calcium effects at receptor sites."

I do not know how mine harden!

Medical History and Pride

If you are interested in the history of our profession in these United States and proud of our accomplishments as a group, find the 9 August 1976 issue of *Time* magazine and start reading "The Struggle to Stay Healthy" on page 60. This is one of several Bicentennial Essays to record the changes that have occurred in the USA during our first 200 years and was written by John H. Knowles, M.D., President of the Rockefeller Foundation. The essay includes many interesting highlights of medical progress, analyzes some of our problems, offers a little philosophy, and notes that in areas of justified criticism of our profession there should be "equal time to extolling our virtues and triumphs." Doctor Knowles lists seven categories of positive progress but counters in each with constructive suggestions.

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Letters To The Editor

Dear Editor:

I am writing to ask you to bring the matter of claims for Medicare reimbursement for laboratory services to the attention of your membership.

Medicare reimbursement rules require that the reasonable charge for a laboratory test was performed by an independent laboratory, but billed by the attending physician, be related to the cost the physician incurred in obtaining the service for his patient. The Medicare carriers are permitted to allow as reasonable a nominal charge by the physician for the drawing of specimens and handling expenses. However, charges representing merely a physician markup of the charges over and above that actually imposed by an independent laboratory for the test itself are improper. Moreover an independent laboratory not certified to perform a given test under Medicare may not be reimbursed with Medicare funds even though that test is billed through a physician.

In carrying out their responsibilities Medicare carriers are required to determine the source of the lab service when the source is not indicated on the physician's bill. Where the service was performed by an independent lab, the carrier must determine that the laboratory is certified by Medicare to perform such tests and the appropriate payment to cover the laboratory's customary charge, rather than the physician's.

Review of Medicare claims indicate that some physicians continue to submit bills for lab tests without showing that the services were actually performed by independent laboratories. We think that it is essential that all of your members are apprised of and understand Medicare requirements, and that there be full disclosure by a physician concerning the source of tests for which payment is claimed under the program. Our aim is to avoid the possibility of physician billing in a manner that could have serious legal consequences.

Thomas M. Tierney, Director
Bureau of Health Insurance
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his fixed combination drug is not indicated or initial therapy of edema or hypertension. dema or hypertension requires therapy itrated to the individual patient. If the fixed ombination represents the dosage so deter-nined, its use may be more convenient in atient management. The treatment of hyper-ension and edema is not static, but must be eevaluated as conditions in each patient varrant.

lications: *Edema:* That associated with con-stive heart failure, cirrhosis of the liver, the hrotic syndrome; steroid-induced and idio-thic edema; edema resistant to other diuretic rapy. *Mild to moderate hypertension:* Useful-ss of the triamterene component is limited to potassium-sparing effect.

ntraindications: Pre-existing elevated serum tassium. Hypersensitivity to either compo-nt. Continued use in progressive renal or patic dysfunction or developing hyperkalemia.

arnings: Do not use dietary potassium supple-nts or potassium salts unless hypokalemia velops or dietary potassium intake is markedly paired. Enteric-coated potassium salts may use small bowel stenosis with or without ulcer-on. Hyperkalemia (>5.4 mEq/L) has been reported in 4% of patients under 60 years, in 12% of patients over 60 years, and in less than 8% of patients overall. Rarely, cases have been associated with cardiac irregularities. Accordingly, **check serum potassium during therapy, particularly in patients with suspected or confirmed renal insufficiency (e.g., elderly or diabetics). If hyperkalemia develops, substitute a thiazide alone. If spironolactone is used concomitantly with 'Dyazide', check serum potassium frequently**—both can cause potassium retention and sometimes hyperkalemia. Two deaths have been reported in patients on such combined therapy (in one, recommended dosage was exceeded; in the other, serum electrolytes were not properly monitored). Observe patients on 'Dyazide' regularly for possible blood dyscrasias, liver damage or other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium (triamterene, SK&F). Rarely, leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with the thiazides. Watch for signs of impending coma in acutely ill cirrhotics. Thiazides are reported to cross the placental barrier and appear in breast milk. This may result in fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and possibly other adverse reactions that have occurred in the adult. When used during pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus.

Precautions: Do periodic serum electrolyte and BUN determinations. Do periodic hematologic studies in cirrhotics with splenomegaly. Antihypertensive effects may be enhanced in postsympathectomy patients. The following may occur: hyperuricemia and gout, reversible nitrogen retention, decreasing alkali reserve with possible metabolic acidosis, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), digitalis intoxication (in hypokalemia). Use cautiously in surgical patients. Concomitant use with antihypertensive agents may result in an additive hypotensive effect. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis; rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting (may indicate electrolyte imbalance), diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

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Final classification of the less than effective indica-ions requires further investigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the terato-genic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this pos-sibility and cautioned against driving a car or operating dangerous machinery.

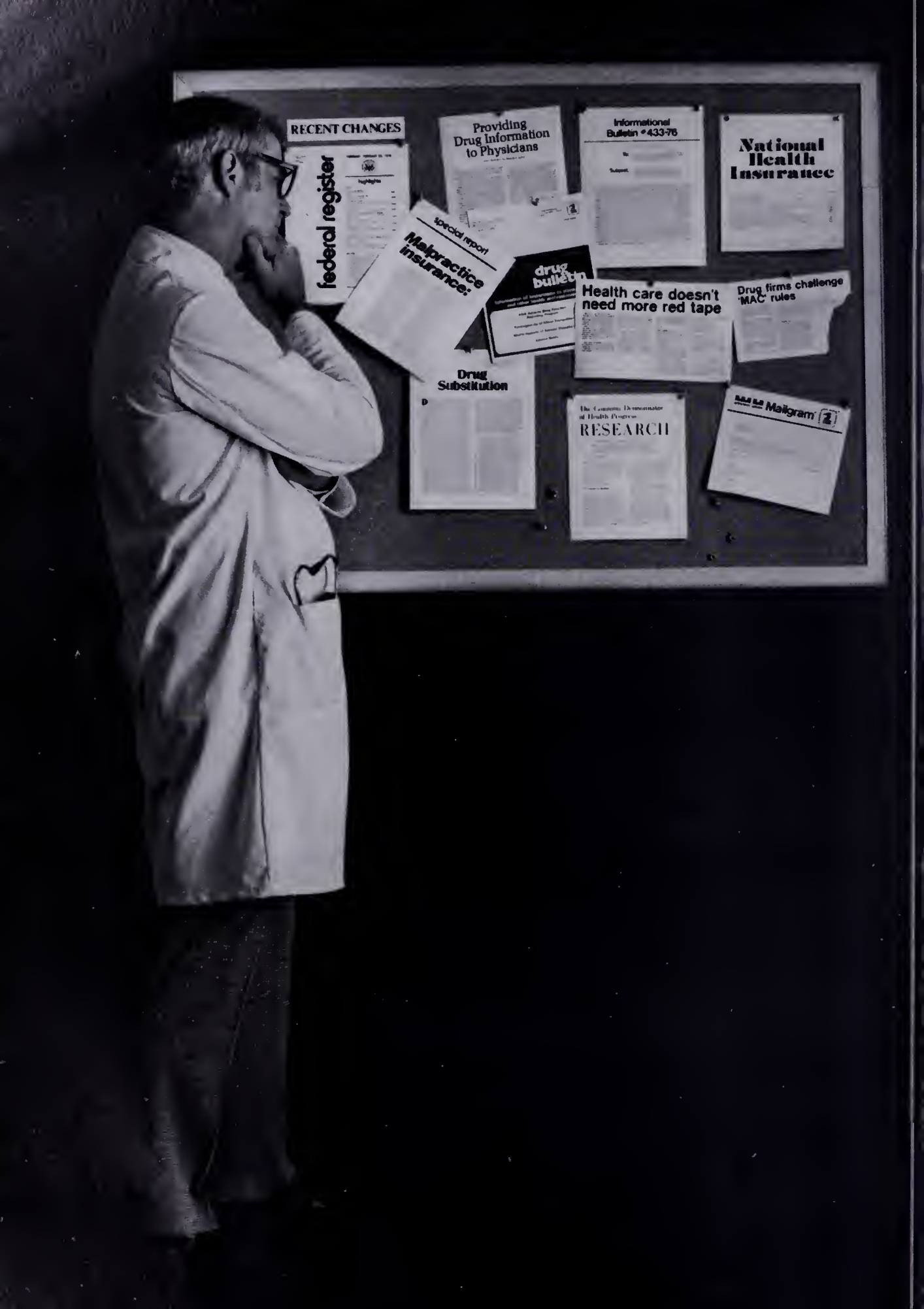
Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

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THERE ARE A LOT OF PEOPLE GETTING BETWEEN YOU AND YOUR PATIENT.

Medicine today is in the spotlight, subjected to all nds of scrutiny. Your control over patient therapy is ing monitored, judged and occasionally abrogated, metimes by unknown third parties.

The worry is that in the wake of this focus, the rela- nship between you and your patient will be weakened, ithout offsetting benefits. Consider three examples:

Drug substitution In most states, pharmacy laws, gulations or professional custom stipulate that your n-generic prescriptions be filled with the precise prod- ts you prescribe. But in the last five years, a dozen or re State laws have been changed, permitting the phar- acist in most cases to select a product of the same neric drug to fill any prescription.

Ironically, this dilution of physician control has ken place against a background of growing evidence at purportedly equivalent drug products may be in- uivalent, since neither present drug standards nor their forcement are optimal. In fact, the FDA itself says it s not enforced the same standards for hundreds of llow-on" products that it had applied to the original DA approvals. Thus physician control over patient rapy is being eroded with a risk that patients may be posed to drugs of uncertain quality.

The major advertised claim for substitution is reduced scription prices for consumers. Yet no documentation any significant savings has been produced.

MAC Maximum Allowable Cost, MAC for short, is federal regulation designed to cut the Government's g bill by setting price ceilings for drugs dispensed to dicare and Medicaid patients. Unless the prescriber tifies on the prescription that a particular product is dically necessary, the Government intends to pay only the cost of the lowest-priced, purportedly-equivalent, generally-available product. The effect of the program may be that elderly and indigent patients will be restricted to products which someone in Washington believes are priced right. Practicing doctors will have little to say about administration of the program, since Government will have absolute authority to make its choices stick.

The drug lag The future of drug and device research depends upon a scientific and regulatory environment that encourages therapeutic innovations. The American pharmaceutical industry annually is spending more than $1 billion of its own funds and evaluating more than 1,200 investigational compounds in clinical research. Disease targets include cancer, atherosclerosis, viruses and central nervous system disorders, among others. But there is a major barrier to the flow of new drugs to your patients: The cost of the research is more than ten times what it was, per product, in 1962; and whereas governmental clearance of new drug applications took six months then, it commonly consumes two years now.

The FDA needs adequate time, of course, to consider data. But it is equally clear that the present approval process contributes to needless delay of needed therapy. That's why the increased efficiency of the drug approval process is vital to all our futures.

If these issues concern you, we suggest that you make your voice heard—among your colleagues and your representatives in State legislatures and in Washington.

It could make a difference in your practice tomorrow.

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MATERNAL MORTALITY



From the Files of the KMA Maternal Mortality Study Committee

—Edited by John W. Greene, Jr., M.D.

1-75. The patient was a 35-year-old, Gravida 4, Para 3, Abortion 1, married, white female, who was transferred from another hospital at approximately two and one-half months gestation. She was completely well until approximately nine days prior to admission when she saw a physician because of a sore throat, earache, myalgia, chills, and fever. Her husband and three children had similar illnesses and were not seen. She was given medication for symptomatic relief. Her condition did not change. Approximately one week prior to admission she began vomiting. The patient consulted her doctor again because of swelling of the left eye and face. She was told at this time that she had a viral infection. Two days prior to admission, she again saw her physician at which time she was admitted to the hospital. Some vaginal bleeding occurred and her hematocrit had dropped to 30, and she was transfused. Her husband states that during this hospitalization she developed a cough productive of purulent material. He also relates that she had a purulent nasal discharge. On the morning of January 1, 1975, the patient was found to be increasingly lethargic and hypotensive. She was given Aramine, KCL, Potassium Gluconate, 1 gm of Solu-Medrol, and transferred to a larger hospital.

In the emergency room she was seen by the Gyn Service because of vaginal bleeding and there expelled the products of conception which were felt to be uninfected. She was then transferred to the Medical Service. The patient's husband denied that she had any prior medical problems except for sinusitis and a miscarriage 17 years prior to this admission. He stated that his wife had not had any chest pain, hemoptysis, history of hypertension, coronary artery disease, or pneumonia. She was, he stated, allergic to Penicillin.

On admission, the patient appeared to be a well developed, well nourished, young, white female, completely obtunded, hyperventilating with a nasotracheal tube in place. She was unresponsive to pain, but showed some spontaneous movement of the left arm and left leg. Her vital signs were: respiratory rate of 38, temperature of 104.4 rectally, blood pressure palpable at 80, and a pulse of 150. There was a bilateral purulent conjunctivitis, the left eye worse than the right eye, no subconjunctival hemorrhages. The left eye was swollen and erythematous. Sclera were non-icteric, the fundi showed sharp disc margins, and venous pulsations were present. The pupils were reactive to light. Nares showed purulent material internally. The nasopharynx was not well visualized because of the endotracheal tube. There was meningismus. There was some blue discoloration of the anterior lower neck and upper chest which blanched with pressure. Lungs showed rhonchi throughout without rales. Cardiovascular examination showed a heart rate of 150. S-1 and S-2 were present but could not be distinguished. There were no murmurs. There was no jugular venous distention nor carotid bruits. Pulses were palpable in the carotids and the femoral area but no distal pulses could be palpated. The abdominal examination showed bowel sounds and the liver and spleen were not palpable. Rectal examination revealed decreased sphincter tone. The uterus was soft and the cervix firm. Some bright red bleeding through the vagina was noted. Rectal examination showed brown stool which was guaiac positive. There was no lymphadenopathy. The extremities showed flaccid paralysis. There was no evidence of splinter hemorrhages of the nail beds. The right leg had a circumference 4 cm greater than the left at the calf and six centimenters greater at the thigh. The left leg appeared very mottled with a palpable cord. Neurological examination: Cranial nerves II-XII could not be evaluated. The patient had no reflexes and bilateral down-going toes.

Laboratory Data: White blood count was 11,200 with a differential of 10 polys, 29 segs, 5 monos, 7 lymphs with toxic granulations, and burr cells; Hematocrit was 40.7. Clotting studies showed pro time of 23/12, PTT of 38/33, and a platelet count of 168,000 with fibrinogen level of 700 mg. SMA 6 showed BUN, 20; Glucose, 105; sodium, 136; potassium, 6.4; CO_2, 12; chloride, 113. Blood gases on 100% oxygen with manual ventilation showed a PO_2, 59; PCO_2, 17; pH, 7.43 with 92% saturation. EKG showed a rate of 160. PR interval was .16; QRS, .06; and QRS axis, +30; non-specific STT and T wave changes. The chest x-rays showed no cardiomegaly and no gross infiltration. Urinalysis showed specific gravity, 1.015; pH, 6.1; +3 proteinuria dn 3+ blood. NG aspirate showed dark blood which cleared after irrigation with ice saline. A lumbar puncture was performed at the L3-4 interspace without difficulty. The fluid was xanthochromic and slightly cloudy. Opening pressure was 430. CSF serum glucose was 105; protein was 296. White blood count was 84% monos and 16% polys. Red cell count was 8 and gram smear showed gram positive cocci in chains.

Clinical diagnosis revealed an incomplete abortion which did not appear to be septic and bacterial meningitis most likely due to pneumococcus. The patient was felt to have hypotension secondary to bacteremia and

perventilation secondary to metabolic acidosis. She d a purulent conjunctivitis, which was felt to be due stress and it was thought the patient had a thrombo-lebitis of the right calf and thigh.

She was placed on mechanical artificial ventilation d begun on Aramine drip for hypotension. She was ated with Neomycin, ophthalmologic ointment for her njunctivitis and given antacids hourly. She was treated h local therapy for the thrombophlebitis. Infectious ease consultation was obtained and it was their feel- the patient had either a streptococcal or pneumococc- meningitis. Although Penicillin would be the drug of oice, because of her allergy, Chloramphenicol 2 gm IV t and 2 gm IV every six hours was recommended. is was done without further improvement in the pa-nt's clinical condition.

At 2:25 a.m. on January 2, 1975, the patient went into ntricular fibrillation and was cardioverted with 400 tt seconds twice without success. Bicarbonate, epine-rine, and calcium were given IV and although con-ued resuscitative efforts were made, the patient's pils became fixed and dilated and she was pro-nced dead.

The cause of death was felt to be bacterial meningitis h sepsis, thrombophlebitis of the left leg, upper GI eding, purulent conjunctivitis, and an incomplete abor-n. Blood cultures and CSF cultures obtained pre-rtem showed 100% Group AB hemolytic strep, sensi-e to the usual antibiotics. Parts of the endocervical a showed many gram positive cocci on gram stain and w out Group A Beta hemolytic Strep, Klebsiella eumonia, and Proteus mirabilis.

An autopsy performed on January 3, 1975, showed: Acute, diffuse, purulent leptomeningitis with post-rtem cultures of blood, peritoneal fluid, uterus, CSF, nt and left lung growing Beta hemolytic Strep. oup A. 2) Moderate pulmonary edema and conges-n, slight pleural effusion. 3) Acute salpingo-oophoritis teral. 4) Acute purulent cystitis. 5) Mild acute litis. 6) Enlarged uterus with retained placental tissue. Multiple small superficial hemorrhagic ulcers of the er esophagus and lesser curvature of the stomach. Acute conjunctivitis of the left eye. 9) Thrombosis in legs bilaterally.

The cause of death was felt to be diffuse, purulent omeningitis, complicating prominent purulent sphe-thmoidal sinusitis with bilateral cavernous sinus ombosis.

Comment

This case was ruled by the Maternal Mortality Com-tee as an indirect obstetrical death. Some members that phlebitis may have been a contributing factor to death.

This case is presented to show that even with the ilability of modern day antibiotic therapy, people still die from such infectious diseases. Perhaps earlier apy may have been effective, but people do die in age from infectious disease.

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ORGANIZATION SECTION

Scientific Sessions—Exhibits—Business Meetings—And More Are All A Part of The 1976 KMA Annual Meeting

In just a few days, the 1976 KMA Annual Meeting will officially get underway when the House of Delegates holds its first session on Monday, September 27 at 9 a.m. in the Jeffersonian Room of the Ramada Inn in Louisville. The scientific sessions will be held from September 28-30 in the Bluegrass Convention Center and will be highlighted by informative presentations featuring guest speakers from Kentucky and throughout the nation.

Emergency medicine, breast problems, and infectious diseases are a few of the many topics to be discussed during the three-day general sessions. The program will also include meetings of 17 specialty groups and the presentation of over 85 scientific and technical exhibits.

Meeting on Tuesday, September 28, at 1:30, will be the anesthesiologists, chest physicians, emergency physicians, pathologists, pediatricians, plastic and reconstructive surgeons, orthopedists, general surgeons, and urologists. Groups representing dermatology, ENT, family medicine, neurosurgery, obstetrics and gynecology, occupational medicine, internal medicine, and psychiatry will meet on Thursday afternoon, September 30.

Mr. J. Ed McConnell of Kentucky Blue Cross and Blue Shield will highlight the President's Luncheon on Wednesday, September 29, at 12:00 noon in the Bluegrass Convention Center. In addition to his presentation on "Kentucky—My Kentucky—Fifty States in the Bicentennial Year," the Luncheon will feature the installation of the new KMA President, Paul J. Parks, M.D., Bowling Green, and the award ceremony. Tickets will be on sale at various locations at the Ramada Inn and Bluegrass Convention Center.

Other highlights of this year's Annual Meeting include two sessions of the KMA House of Delegates (September 27 and 29), the Annual Convention of the Auxiliary to KMA (September 27-29), the annual KEMPAC Seminar (September 27), and alumni reunions of the University of Louisville and University of Kentucky medical schools.

Complete details on all facets of the 1976 Annual Meeting were featured in the August issue of *The Journal of KMA*.

Miscellaneous Meetings Planned During KMA Annual Session

Several miscellaneous meetings have been scheduled during the KMA Annual Session. The time, date, and place of meetings planned at press time are listed below for your information.

Sunday, September 26

12:30 p.m. KMA Board of Trustees, Luncheon Meeting, Grand Republic Room, Bluegrass Convention Center

Monday, September 27

9:00 a.m. KMA House of Delegates, Jeffersonian Room, Ramada Inn

12:30 p.m. Reference Committee Chairmen, Luncheon, Majestic Room, Bluegrass Convention Center

2:00 p.m. Reference Committee Meetings, Island Queen and Idlewild Rooms, Cincinnati Room, Eclipse Room, Grand Republic Room, Delta Queen Room, Natchez Room, Bluegrass Convention Center

6:00 p.m. KEMPAC Reception, Seminar and Banquet, Banquet Area, Bluegrass Convention Center

6:00 p.m. Kentucky Urological Association, Cocktail Party, Kentucky Room, Ramada Inn

UL Class of 1971, Dinner, Embassy Club

Tuesday, September 28

12:00 noon KMA Executive Committee and Reference Committee Chairman, Luncheon Meeting, Mark Twain Room, Ramada Inn

12:00 noon Kentucky Chapter, American College of Surgeons, Luncheon, Jeffersonian Room, Ramada Inn

5:30 p.m. KMA-AKMA Reception To Honor Presidents-Elect, Poolside, Ramada Inn

5:30 p.m. University of Louisville Alumni Reception, Plainview Racquet and Swim Club

7:00 p.m. UL Class of 1941, Dinner, Natchez Room, Bluegrass Convention Center

7:30 p.m. UL Class of 1936, Dinner, Jeffersonian Room, Ramada Inn

7:30 p.m. Kentucky Chapter, American Academy of Pediatrics, Dinner, Audubon Country Club

Wednesday, September 29

7:30 a.m. Maternal Mortality Study Committee, Breakfast Meeting, Mark Twain Room, Ramada Inn

12:00 noon KMA President's Luncheon, Banquet Area, Bluegrass Convention Center

4:00 p.m. KMA Board of Trustees, Meeting and Dinner, Grand Republic Room, Bluegrass Convention Center

6:00 p.m. Fayette County Medical Society Caucus, Eclipse Room, Bluegrass Convention Center

7:00 p.m. KMA House of Delegates, Banquet Area, Bluegrass Convention Center

Thursday, September 30

Kentucky Obstetrical and Gynecologic Society, Breakfast, Island Queen and Idlewild Rooms, Bluegrass Convention Center

12:00 noon Kentucky Obstetrical and Gynecologic Society, Luncheon, Island Queen and Idlewild Rooms, Bluegrass Convention Center

12:00 noon KMA Board of Trustees, Luncheon Meeting, Jeffersonian Room, Ramada Inn

12:00 noon Kentucky Occupational Medical Association, Luncheon, Louisville Room, Ramada Inn

12:00 noon Kentucky Psychiatric Association, Council Luncheon, Mark Twain Room, Ramada Inn

6:30 p.m. Kentucky Psychiatric Association, Dinner, Jeffersonian Room, Ramada Inn

September 27-28-29

University of Louisville Hospitality Suite, Room 1181 and 1183, Ramada Inn

Dr. Asman Appointed As Editor, Other Journal Positions Filled

Henry B. Asman, M.D., Louisville, was elected Editor of *The Journal of the Kentucky Medical Association* by the Board of Trustees at its August 12 meeting. Dr. Asman succeeds Walter I. Hume, Jr., M.D., Louisville, whose resignation was accepted by the Board after having completed three consecutive terms as *Journal* editor. Doctor Asman will assume editorship at the beginning of the Associational year on September 30.



Doctor Asman

Doctor Asman, who has served as Associate Editor since 1970, has held many offices in the Association. He was the 1968-69 KMA President and previously served as Vice-President in 1961 and Secretary from 1963 to 1967. A 1936 graduate of the University of Louisville School of Medicine, Doctor Asman is a Fellow of the American College of Surgeons and a past President of the Ohio Valley Proctologic Society. A 1975 recipient of the KMA Distinguished Service Award, Doctor Asman currently serves as Director of Medical Services for Kentucky Blue Cross and Blue Shield.

Elected to the position of Associate Editor was John S. Llewellyn, M.D., Louisville, who has served as Assistant Editor since 1974. A former KMA Trustee from the Fifth District, Doctor Llewellyn is a 1940 graduate of Loyola University and is a member of the American Society of Internal Medicine. He is a Fellow of the American College of Physicians.

The Board also named Milton F. Miller, M.D., Louisville, to succeed Doctor Llewellyn as Assistant Editor. Doctor Miller, a 1954 graduate of the University of Louisville, is also an internist.

Reappointed to the position of Assistant Editor were A. Evan Overstreet, M.D. and G. Randolph Schrodt, M.D., both of Louisville. Paul C. Grider, Jr, M.D., Louisville, will continue to serve as Scientific Editor, a position he has held since 1974.

Digest of Proceedings, Board of Trustees July 22, 1976

A special session of the Board of Trustees was called for July 22 for the specific purposes of discussing three major items of concern to KMA: Liability Insurance, Health Services Areas, and Professional Standards Review Organizations.

The meeting was designed to both inform the Board members fully of the current status of these topics and offer them an opportunity to make inquiries from resource persons who had been invited to discuss these subjects. Approximately two hours was devoted to each of the subject matters and it was felt that the meeting was most beneficial to the members of the Board.

In other action during the day, the Board ruled that a Vice-Speaker of the House of Delegates would be named at the August Board meeting to serve during the 1976 Annual Meeting, at which time the House would elect a Vice-Speaker who will complete service of an unexpired term of two years remaining. They further ruled that an AMA Alternate Delegate position that became vacant would also be filled by the House of Delegates at their meeting. There is one year remaining in this two-year term.

Ky. ACP To Meet Oct. 30

The Kentucky Regional Meeting of the American College of Physicians will take place at Stouffer's Louisville Inn on October 30. Specialists in internal medicine and related medical fields from Kentucky attending this meeting will be eligible for credit toward the AMA Physician's Recognition Award, Category I.

For further information on this scientific session, contact Franklin B. Moosnick, M.D., 184 N. Mill Street, Lexington 40507.

Honors Bestowed

Hiram C. Polk, Jr., M.D., Louisville, has been appointed to the 20-member Board of Directors of the American Board of Surgery, Inc. Doctor Polk, who has been Professor and Chairman of the University of Louisville Department of Surgery since 1971, will represent the American Surgical Association on the Board's directorate.

Keith P. Smith, M.D., Corbin, was recently named the "Outstanding Citizen of the Year of Corbin." A family physician, Doctor Smith is a former KMA Vice-President and Board Chairman and served as its Treasurer from 1963 to 1975.

UK To Sponsor Reading Retreat On Breast and Skin Cancer

A Cancer Reading Retreat is being scheduled for November 5-7 at Jenny Wiley State Park in Prestonsburg. The Retreat, which is sponsored by the University of Kentucky College of Medicine's Office of Continuing Education and the Ephraim McDowell Community Cancer Network, stresses the importance of reading as a means of continuing education.

A comprehensive reading review will be conducted of the scientific literature concerning Breast Cancer and Cancer of the Skin. Practical approaches and application to the clinical management of breast and skin malignancies will be presented and discussed.

The program has been approved for 13 hours of Category I credit toward the Physician's Recognition Award. Thirteen hours of credit have been requested from the American Academy of Family Practice. For further information, contact the Office of Continuing Education, College of Medicine, University of Kentucky, Lexington, Kentucky 40506, or call (606) 233-6117.

1976 KMA Annual Meeting Gets Continuing Education Credit

Approval for 16 1/2 hours of prescribed credit has been granted by the American Academy of Family Physicians for this year's Annual Meeting.

Credit may also be obtained on an hour-for-hour basis toward Category I of the Physician's Recognition Award from the American Medical Association.

MINI-RESIDENCIES for Medical and Surgical Practitioners in "Office Management of Emotional Problems," (one, two and three week courses), offered by the University of Kentucky Medical Center. Minimum of 40 hours a week; tuition of $350 per week for the 1st and 2nd week of training and $500 for the 3rd week of supervised practice with patients in the Intensive RBT Treatment Program. For further information, contact Maxie C. Maultsby, Jr., M.D., Office of Continuing Education, Department of RBT, University of Kentucky, Lexington, 40506.

KMGA Golf Tournament

The Kentucky Medical Golf Association will hold its annual fall tournament on Wednesday, September 29, at Harmony Landing Country Club in Louisville.

The fee for the tournament is $20. Call or write Donald L. Ware, M.D., 750 Medical Towers South, Louisville 40202. Telephone (502) 583-8341.

In Memoriam

MARIE E. BIEHL, M.D.
Louisville
1895-1976

Marie E. Biehl, M.D., 80, died on August 4. Doctor Biehl was the first woman to attend the University of Louisville Medical School in 1918. A general practitioner for 46 years, Doctor Biehl belonged to the American and Kentucky Academy of Family Physicians. She was an Emeritus member of the Jefferson County Medical Society, as well as the Kentucky and American medical associations.

Report From the KMA Cancer Committee

(Continued from page 447)

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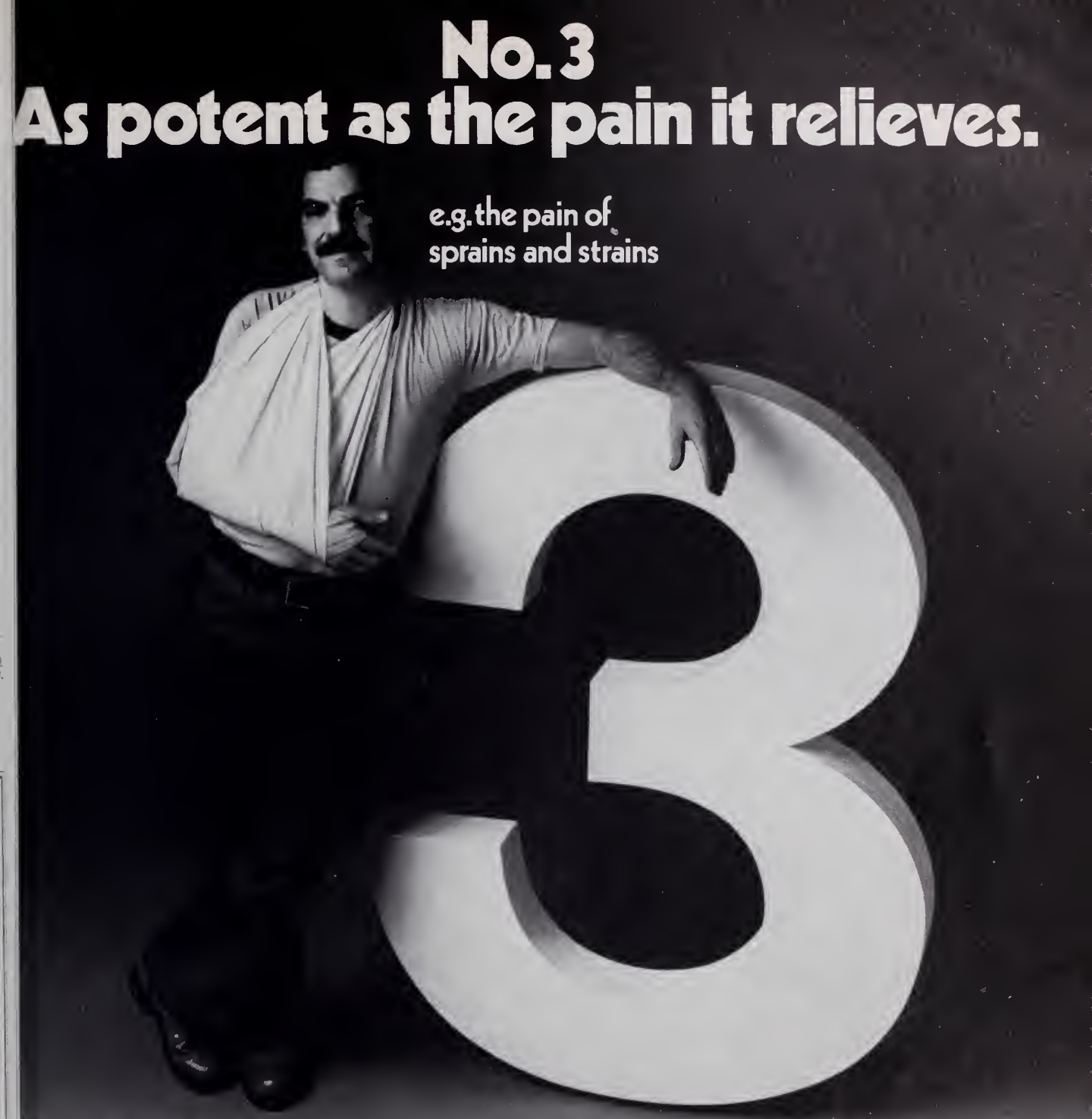
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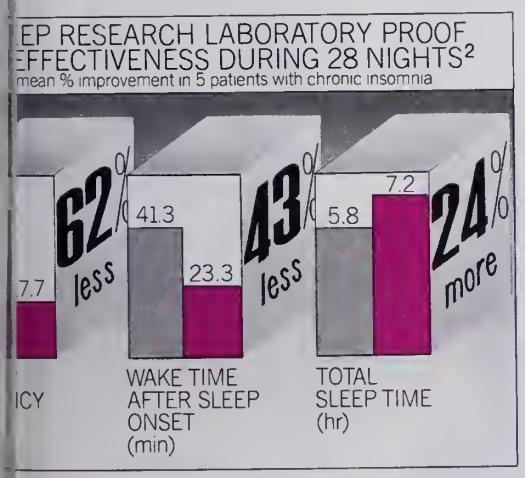
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insomnia is often transient and intermit- prolonged administration of a hypnotic is y not necessary or recommended. But when a is a chronic or recurring problem, d effectiveness is as important as initial ness. Results of a recently published sleep laboratory study[1] demonstrated that, while rbital lost effectiveness within two weeks, e maintained effectiveness for 28 consecu- nts. Similar 28-night results with Dalmane, d below, were obtained by a second sleep group.[2] In previous studies,[3] both chloral and glutethimide began to lose effective- er several nights, while Dalmane main- ffectiveness throughout the 14 medication Whether the problem is difficulty falling staying asleep or sleeping long enough, r these results when selecting a edication.



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Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; and in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving). Use in women who are or may become pregnant only when potential benefits have been weighed against possible hazards. Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, initial dosage should be limited to 15 mg to preclude oversedation, dizziness and/or ataxia. If combined with other drugs having hypnotic or CNS-depressant effects, consider potential additive effects. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported were headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, ha tions, and elevated SGOT, SGPT, tc direct bilirubins and alkaline phos Paradoxical reactions, *e.g.*, exciten stimulation and hyperactivity, hav been reported in rare instances.

Dosage: Individualize for maximun effect. *Adults:* 30 mg usual dosage; may suffice in some patients. *Elder debilitated patients:* 15 mg initially response is determined.

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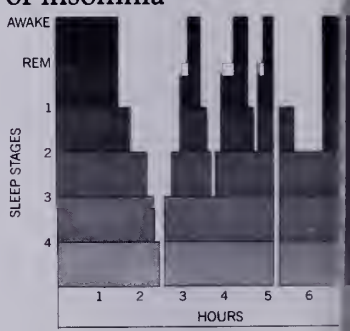
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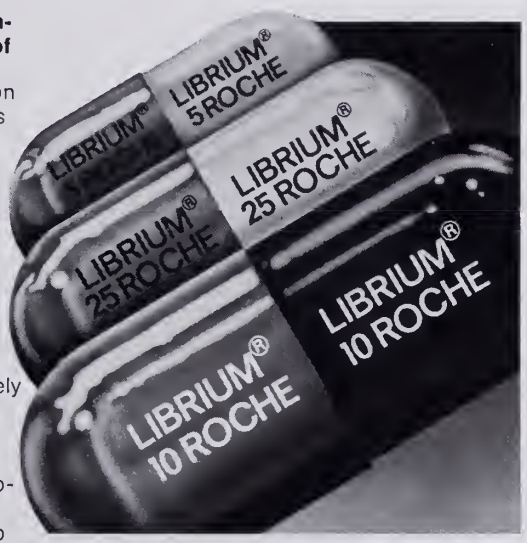
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dications: Relief of anxiety and tension curring alone or accompanying various sease states.

ntraindications: Patients with known persensitivity to the drug.

arnings: Caution patients about pos-ble combined effects with alcohol and ner CNS depressants. As with all CNS-ting drugs, caution patients against zardous occupations requiring com-ete mental alertness (*e.g.*, operating chinery, driving). Though physical d psychological dependence have rarely en reported on recommended doses, e caution in administering to addic-n-prone individuals or those who ght increase dosage; withdrawal symp-ms (including convulsions), following continuation of the drug and similar to se seen with barbiturates, have been re-rted. Use of any drug in pregnancy, lac-ion, or in women of childbearing age quires that its potential benefits be ighed against its possible hazards.

ecautions: In the elderly and debilitated, d in children over six, limit to smallest fective dosage (initially 10 mg or less per y) to preclude ataxia or oversedation, creasing gradually as needed and toler-ed. Not recommended in children under . Though generally not recommended, if mbination therapy with other psycho-pics seems indicated, carefully consider dividual pharmacologic effects, particu-ly in use of potentiating drugs such as AO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido —all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Usual Daily Dosage: Individualize for maximum beneficial effects. *Oral—Adults:* Mild and moderate anxiety and tension, 5 or 10 mg *t.i.d.* or *q.i.d.;* severe states, 20 or 25 mg *t.i.d.* or *q.i.d. Geriatric patients:* 5 mg *b.i.d.* to *q.i.d.* (See Precautions.)

Supplied: Librium® (chlordiazepoxide HCl) *Capsules*, 5 mg, 10 mg and 25 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10. Libritabs® (chlordiazepoxide) *Tablets*, 5 mg, 10 mg and 25 mg—bottles of 100 and 500. With respect to clinical activity, capsules and tablets are indistinguishable.

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Please see following page.

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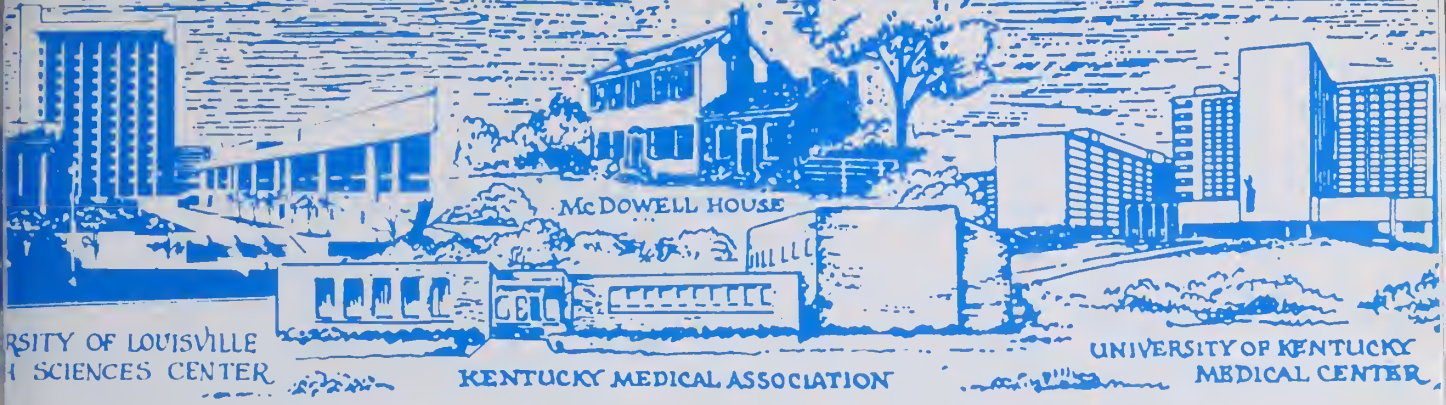
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Please see preceding page for a summary of product information.



The Journal of The

KENTUCKY

Medical Association

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ME 74 OCTOBER 1976 NUMBER 10

Both often



Predominant psychoneurotic anxiety

Associated depressive symptoms

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequen and/or severity of grand mal seizures n require increased dosage of standard a convulsant medication; abrupt withdra may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous i gestion of alcohol and other CNS depre sants. Withdrawal symptoms (similar t those with barbiturates and alcohol) ha occurred following abrupt discontinuar (convulsions, tremor, abdominal and m cle cramps, vomiting and sweating). K addiction-prone individuals under care

respond to one

According to her major ymptoms, she is a psychoneu- otic patient with severe nxiety. But according to the escription she gives of her eelings, part of the problem ıay sound like depression. 'his is because her problem, lthough primarily one of ex- essive anxiety, is often accom- anied by depressive symptom- tology. Valium (diazepam) an provide relief for both—as ıe excessive anxiety is re- eved, the depressive symp- ms associated with it are also ften relieved.

There are other advan- ıges in using Valium for the ıanagement of psychoneu- otic anxiety with secondary epressive symptoms: the sychotherapeutic effect of 'alium is pronounced and ıpid. This means that im- rovement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.



Valium® (diazepam) IV

2-mg, 5-mg, 10-mg scored tablets

in psychoneurotic anxiety states with associated depressive symptoms

urveillance because of their predisposi- on to habituation and dependence. In regnancy, lactation or women of child- earing age, weigh potential benefit gainst possible hazard.

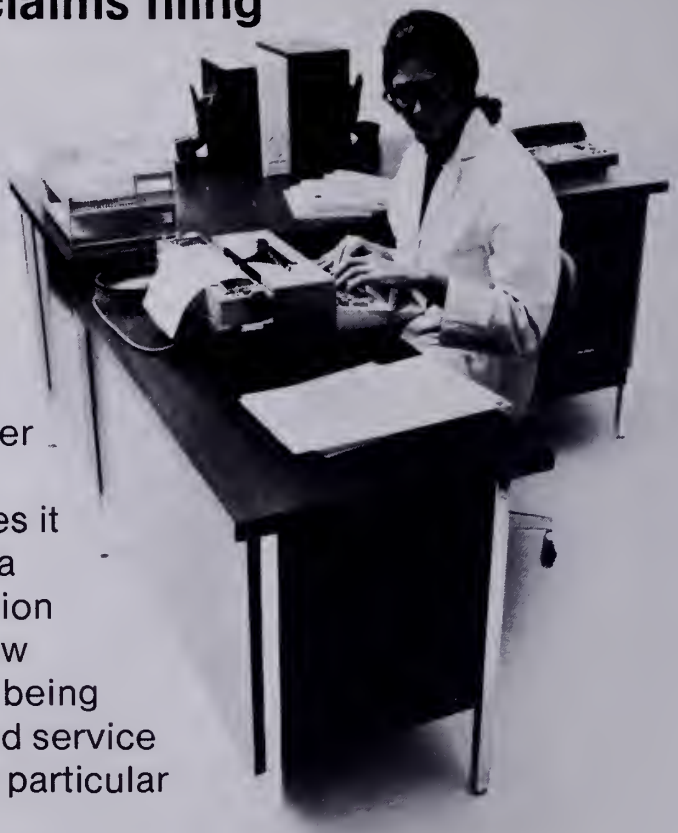
recautions: If combined with other psy- notropics or anticonvulsants, consider arefully pharmacology of agents em- oyed; drugs such as phenothiazines, arcotics, barbiturates, MAO inhibitors nd other antidepressants may potentiate s action. Usual precautions indicated in atients severely depressed, or with latent epression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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Volume 74 • October 1976

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MESSAGE FROM THE PRESIDENT



I appreciate very much the confidence you have expressed in me in permitting me to be your spokesman this next year. I shall be trying to represent your views and wishes as you have expressed them through the actions of the House of Delegates and the Board of Trustees.

At the outset of my year as President, I want to impress upon you the importance of organization if we are to accomplish any positive approach to retaining our long-held belief in the free enterprise system of medical practice. I believe that we have the best system of practice and the highest quality of medical care of any country in the world. I admit that there are certain weaknesses that we can remedy if given the time. I do not believe that any form of government-sponsored medical care will be better or cheaper than that which we now offer. If we are to continue to have the opportunity to offer this care we must work together, not divergently.

There are nearly 3,300 physicians practicing medicine in Kentucky. There is no way the Association can speak for each of these but we must hear their opinions as expressed personally, through their component medical societies, through their committee structure and through their trustee. In this way, policy can be formed, studies can be made, and their wishes can be carried out in a manner that can help all of us.

The day of practicing medicine the way I want to, with no dictate except my relationship with my patient, has long since disappeared. There is no way in this era to ignore insurance companies, government, the legal profession, and other organized consumers. But by working together and expressing a united opinion at all levels of third party negotiations, we can at least continue to try to do the best we know how to do for the betterment of the health of our individual patients and thus for all of medicine.

Join your KMA! Join your AMA! Work on committees at local, state, and national levels and your voice will be heard. It won't be if you assume no responsibility in any of these.

Paul J. Parks

A Link in the Chain

Auxiliary



Coming Together is a BEGINNING
Keeping Together is PROGRESS
Working Together is SUCCESS
SOMETHING FOR EVERYONE

There is no way I can begin this term of office without voicing my admiration for Immediate Past President, Gerry Montgomery. She has been an excellent leader and has shown her love and dedication to the Auxiliary members from border to border.

Auxiliary members have shown for years that one person can make a difference. Perhaps it's the county President who spurs the members to excel. Perhaps it's the membership chairman who is busy trying to retrieve former members as well as encouraging new members to join. To each of the 28 county Presidents, I would like to remind you that it is your responsibility to direct and coordinate the activities of your county. But your greatest challenge is to inspire your members. It all begins in YOUR county.

We are all aware of the many serious problems facing the medical profession today. We must be informed on matters that affect the practice of medicine. If the future of medicine is going to depend on what people think, we must give them the correct story because no one else is going to. Encourage all members of the Auxiliary and all friends to vote in this election year. Be prepared to write to your Congressmen and Senators. We can make a difference!

The AMAA Goals for 1976-1977 are:

1. Let's unite to build a strengthened, unified membership.
2. Let's continue enthusiastic support of AMA-ERF, Our commitment to Medical Education.
3. Let's step up emphasis on legislation by supporting good medical legislation and by working against harmful legislation. Let's work in politics to put people favorable to medicine in Washington.
4. Let's communicate our worthwhile projects that benefit people to the public in our members and to the medical society.

We need the spouses of every member of KMA to be a member of A-KMA. Working together is the strength that builds an organization. We need you.

Something For Everyone is the theme for 1976-1977 and believe me, the Auxiliary offers this. Auxiliary accomplishes so very much through every individual member.

It is with great pride that I serve this Auxiliary as State President. I look forward to visiting the various county auxiliarys and enjoying the friendships that develop by serving this organization.

Food for thought: EARN THY NEIGHBOR'S LOVE!

MRS. R. PARNELL ROLLINGS, PRESIDENT
AUXILIARY TO THE KMA

POSTGRADUATE OPPORTUNITIES

IN KENTUCKY

OCTOBER

20-21 "Current Trends in Allergy and Immunology,"** University of Louisville Health Sciences Center, Louisville

20 17th Annual John Walker Moore Lecture, "The Immunological Consequences of Infections,"** University of Louisville Health Sciences Center Auditorium, Louisville

25 24th Annual David W. Yandell Lecture,** University of Louisville Health Sciences Center Auditorium, Louisville

27 "Endoscopy,"** Louisville Area CME Consortium Health Sciences Center, Louisville

28-30 Twelfth Annual Bronson Course in Diagnostic Ophthalmic Ultrasound,** University of Louisville Health Sciences Center, Louisville

30 Kentucky Regional Meeting, American College of Physicians, Stouffer's Louisville Inn, Louisville. Contact: Franklin B. Moosnick, M.D., 184 N. Mill Street, Lexington, Ky. 40507

NOVEMBER

3 Twelfth Annual Louisville Pediatric Society Lecture, Health Sciences Center, Louisville

4-5 Tenth Annual Newborn Symposium, University of Louisville School of Medicine, Health Sciences Center, Louisville

5-7 Cancer Reading Retreat,* University of Kentucky Clinical Cancer Education Program, 13 hours Category I, Jenny Wiley State Park, Prestonsburg

13-14 Fall Seminar, Kentucky Academy of Family Physicians, Cumberland Falls

17 First Annual Marion F. Beard Symposium (Hematology Related), Louisville Regional Red Cross Blood Center, Louisville

17 "Urinary Tract Infections,"** Louisville Area CME Consortium, Health Sciences Center, Louisville

DECEMBER

2-3 "Genetic Counseling for the Practicing Physician,"** University of Louisville Health Sciences Center, Louisville

6 "Diagnosis and Office Management of Hypertension,"** Marriott Inn, Clarksville (Louisville Area)

17-18 "Gastrointestinal Workshop for the Practicing Physician,"* University of Kentucky Medical Center, Lexington

IN SURROUNDING STATES

OCTOBER

20 "Cardiopulmonary Workshop for Practicing Physicians," St. Joseph Memorial Hospital, Kokomo, Ind.

21 "Thromboembolic Disease—Current Concepts," Reid Memorial Hospital, Richmond, Ind.

26-27 Symposium on Urgent and Controversial Pediatric Conditions, Indiana University School of Medicine, Stouffer's Indianapolis Inn, Indianapolis. Contact: Jay Grosfeld, M.D., James Whitcomb Riley Hospital for Children, 1100 W. Michigan St., Indianapolis, Ind. 46202.

NOVEMBER

5 "Recent Clinical Advances in the Management of the Patient with Malignant Disease," (For the Primary Care Physician) Stouffer's Inn, Indianapolis

DECEMBER

1-2 "Treatment and Management of Chronic Obstructive Lung Disease," Holiday Inn Airport, Indianapolis

2 "Clinical Syndromes of Auto-Immunity," Reid Memorial Hospital, Richmond, Ind.

TRAINING WORKSHOPS IN S.A.F.E. OFFICE SEX COUNSELING AND THERAPY, are being offered free for physicians and nurses through the office of Continuing Education of the University of Kentucky Medical Center. The workshop is approved for 24 hours of Category I credit for physicians. For further information contact: Linda Carpenter, M.S., Coordinator, Center for Rational Behavior Therapy Training, Office of Continuing Education (N204A), UKMC, Lexington, Kentucky 40506.

**For further information, contact: Frank R. Lemon, M.D., Associate Dean for Continuing Education, University of Kentucky College of Medicine, Lexington 40506*
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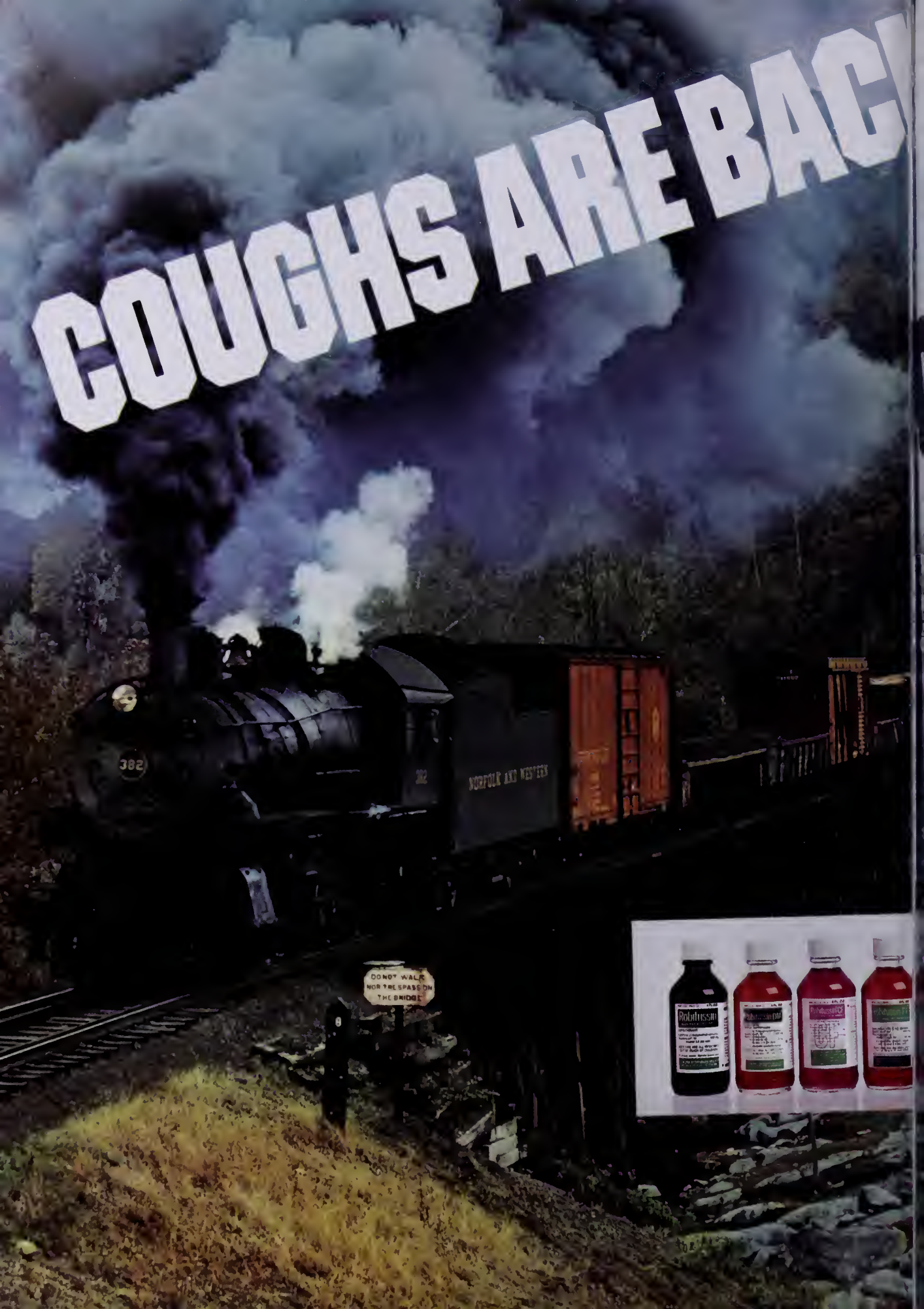
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Dextromethorphan
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Decongests nasal passages and sinus openings as it helps relieve coughs

Robitussin-PE®

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Pseudoephedrine
Hydrochloride, NF ..... 30 mg
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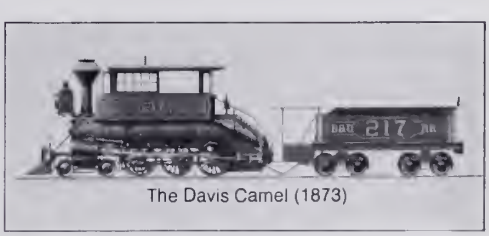
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Phenylpropanolamine
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Dextromethorphan
Hydrobromide, NF ..... 10 mg
Alcohol, 1.4%

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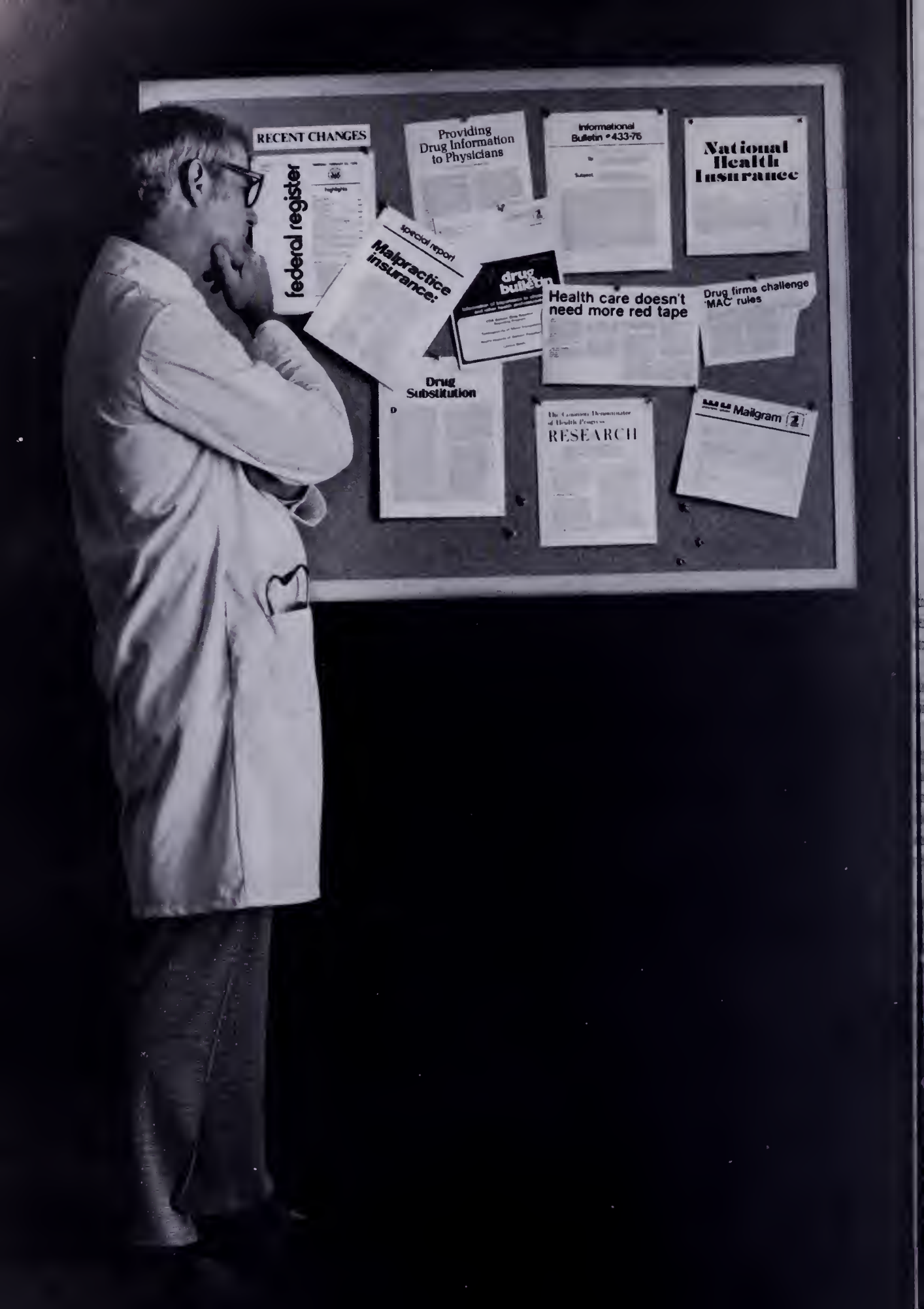
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Gynecological Laparoscopy in a Large Private Practice

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The use of the laparoscope and electrosurgery for tubal fulguration is found to be a satisfactory means of permanent sterilization. Laparoscopy, in itself, is very useful in the diagnosis and treatment of numerous intra-abdominal and pelvic disorders.

THE history of the development of the laparoscope, along with fiber optics as a light source, has been more than adequately covered in many publications. It is important to say only that the development of the fiber optic glass bundle by Hopkins and Kopany in 1952 opened a new era in endoscopy of all sorts by removing the light source from the abdominal cavity to its present place on a stand separated from the body by a flexible, light-carrying, glass bundle.

Uses of Laparoscopy

1. The initial impetus for learning and using laparoscopy was for fulguration of the Fallopian tubes, thus producing permanent sterilization. This still remains the most common indication for the use of the laparoscope, although many different uses have followed.

In the author's experience, the failure rate thus far has been 0.0%. There are no known pregnancies in 979 patients.

Later in this paper, there will be a discussion of technique, instruments used, and complications (as well as ways of avoiding complications).

2. Laparoscopy is an excellent means for the evaluation of pelvic pain, as well as possible abnormalities of the uterus and adjacent structures. This encompasses a very large number of disorders including endometriosis, small ovarian cysts, chronic salpingo-oopheritis, location of intraperitoneal intrauterine devices, the identification of abnormal ovaries that may require biopsy and visualization and section of peritubal adhesions in certain applicable cases.

3. As the indications for laparoscopy widened, perhaps the most interesting use was as an adjunct in the study of the non-fertile female. These patients were considered for laparoscopy if: (a) there was a normal sperm analysis on the male partner, (b) sufficient evidence of satisfactory ovulation was obtained, and (c) the patient requested that the procedure be done. This was accomplished very simply by dilating the cervix, performing a D & C, and injecting a weak solution of methylene blue into the uterus through the Semm's Suction Cup. The progress of the dye through the Fallopian tubes was then noted under direct vision by use of the laparoscope. As the dye was being injected, tubal patency and mobility were observed, as well as the appearance of the ovaries and the pelvis in general. If one or both of the Fallopian tubes were occluded, the sites could be noted for possible later tuboplasty. This was not meant to replace the hysterosalpingogram, but enabled one to obtain a somewhat

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more complete overview of the pelvis of the female in question.

4. It should be mentioned at this time that the laparoscope also has nongynecological related uses. Liver biopsies may be performed by use of the laparoscope. The routine method of inserting the laparoscope and the operating instrument (laparoscopic biopsy forceps) is employed and the upper abdominal cavity should be well illuminated, easily exposing the liver edge. Biopsies of this edge were taken in several places and then the biopsy forceps were replaced in the defect created by the biopsy and a coagulating current was applied, thus cauterizing the base of the biopsy site. This has been very successful to date, with no occurrences of post-operative bleeding.

Equipment Presently Used

Many types of laparoscopes are now in use. These range from 5-12 mms in diameter. Some utilize the single-puncture instrument with grasping forceps on the end of the laparoscopic tube. Others use the double-puncture instruments with straight, simple fiber optic scopes and the second incision being made to gain access to the abdomen. The authors have always used the double-puncture approach in the belief that this allows much more freedom in manipulating the pelvic contents.

The abdomen is distended prior to the actual procedure by introduction of approximately three liters of CO_2 into the abdominal cavity. This is done by carefully thrusting a Verres needle through the abdominal wall in a pre-chosen area; the most common site being the infra umbilical fold because of fusion of the skin, fascia, and peritoneum at this point. It is of interest to note, however, that other sites have occasionally been used, such as: (a) above the umbilicus, (b) lateral to the umbilicus, (c) the left lower quadrant and (d) suprapubically in the massively obese.

The needle is then connected to the present insufflation source, a Wisap "CO_2-Pneu Automatic" Insufflator, which is pre-set to deliver five liters of CO_2. This machine shows two gauges—one measuring the amount of CO_2 delivered and one measuring the intra-abdominal pressure (in mms of Mercury). At no time should the intra-abdominal pressure exceed 30 mms of Mercury during the insufflation. As the Verres needle is inserted, there are two distinct snaps of the needle; one as the needle passes through the fascia, and a second as it passes through the peritoneum. At this point, a polyethylene tube is connected to the insufflator, which is set to deliver one liter of CO_2 per minute. If the needle is intraperitoneal as desired, the pressure gauge will usually read less than 12-14 mms of Mercury. If the pressure exceeds 22 mms of Mercury on the initial insufflation, then the needle has definitely been put in the wrong place and should be immediately removed and the procedure started again. Many times, a piece of supraperitoneal fat will be found to be obstructing the gas egress holes in the Verres needle. This needs only to be removed and the needle reinserted.

A 1 cm incision is then made beneath the umbilicus, and the larger trocar (10 mms) with a tightly fitting sleeve is used to gain access to the abdominal cavity. The trocar is then removed and the laparoscope is inserted through this sleeve.

The second trocar and sleeve are inserted through a small suprapubic incision after transillumination of the lower abdominal wall. Through this, under direct vision, the operative instruments are placed. The Semm's Suction Cup has been attached to the previously prepped cervix by negative pressure to serve as a means by which one may move the uterus and through which dye may be injected to study patency of the Fallopian tubes.

There is a variety of probes, scissors, ring applicators, biopsy forceps, etc., available to fit through the second sleeve.

Sterilization Procedure Presently In Use

Most patients are admitted two or three hours before the scheduled time of surgery and have had nothing by mouth for the previous eight hours. At present, they are given no pre-operative sedation. A complete blood count and urine examination are obtained prior to the procedure.

Generally speaking, endotracheal intubation during anesthesia has been abandoned. The anesthetic of choice currently used is as follows: (a) sleep is induced by Sodium Pentathol (occasionally Fentynyl is used also), (b) the patient is then carried through the procedure with intravenous muscle relaxants (Anectine, etc.) O_2, and N_2O with bag and mask only. An oral-pharyngeal airway is used. Occasionally, a patient is intubated for reasons of massive obesity, or other special physical conditions.

The authors use a different procedure from this point onward. One procedure involves grasping the skin paraumbilically with the forefinger and thumb on both sides and stretches this area upward to insert the Verres needle. The other procedure involves the use of towel clips paraumbilically to elevate this area.

After sufficient CO_2 (approximately three liters) has been introduced into the abdomen, the Verres needle is withdrawn. The trocar and sleeve of the laparoscope are inserted by a swift, deft thrust through the incision—a slight twisting motion is used by some. The laparoscope is placed through this sleeve and the pelvic cavity can be easily visualized.

The Semm's Suction Cup, already attached to the cervix, is used to manipulate the uterus and to bring the pelvic contents into view. The patient is then elevated and placed in a Trendelenburg position, thus improving the view of the pelvis.

The second incision is made just above the pubic hairline through which the trocar and sleeve of the operating instrument are inserted under direct vision. It is a good idea to rigidly extend the index finger along this trocar which leaves only 3 cm of sharp instrument to pass through into the peritoneal cavity, thus avoiding inadvertent injury to the pelvic structures.

At this point, the authors again vary as to their sterilization procedure. One way is to insert a Palmer Grasping Forceps and thoroughly coagulate the Fallopian tubes at the cornua of the uterus and again 1.5 cm lateral to this. No other procedure is done.

The other way utilizes biopsy forceps to remove a piece of Fallopian tube between the two burned areas, thus interrupting the continuity of the tube.

The electrical power source used is the Ritter CSB Spark-gap Electro Surgical Unit which is set on a coagulating current of 35-40. After the procedure is completed, the instruments are all withdrawn, the CO_2 is allowed to escape and the incisions are closed with 4-0 nylon. The procedure for diagnostic laparoscopy is precisely the same except the lower trocar is rarely introduced.

Results

Over a four-year period, the authors have performed 979 laparoscopies for tubal coagulation and 185 laparoscopies for diagnosis and treatment for a total of 1,164 laparoscopic procedures. At the time of this publication, we have had **no** failures of sterilization (no pregnancies). There have been no complications of the diagnostic laparoscopies. (Table 1)

Table 1

TOTAL NUMBER OF LAPAROSCOPIC EXAMINATIONS

Number of laparoscopic procedures for sterilization	979
Number of laparoscopic procedures for diagnosis	185
(a) investigation of chronic pelvic or adnexal pain	96
(b) as adjunct to infertility work-up	89
Total number of laparoscopic examinations	1,164

Complications Secondary to the Sterilization Procedure

Very early in the series, there occurred the one bowel burn, which was recognized almost immediately and required laparotomy for closure of the defect. The patient made an uneventful recovery.

There was one incident of rupture of a peritubular varicosity, again necessitating laparotomy to control the bleeding. The other complications are self-explanatory. (Table 2)

Table 2

COMPLICATIONS SECONDARY TO THE STERILIZATION PROCEDURE

A.	Serious:	
	Bowel burn	1
	Rupture of pelvic varicosity	1
B.	Minor:	
	Sub-fascial injection of CO_2	4
	Small skin burns (less than 1 cm in diameter)	2
	Small hematomas of the umbilicus	2

Discussion

Coagulation of the Fallopian tubes by electrocautery, using the laparoscope to visualize the pelvic contents, is a safe and useful procedure in the hands of the experienced operator. There are several important points of discussion.

1. The Semm's Suction Cup is almost an absolute necessity. A thorough pelvic examination is done, and the endocervical canal is sounded in order to ascertain its curvature. If the uterus is strongly retroverted, then the cannula must be inserted upside-down to avoid perforation of the uterus.

2. The Verres needle may be inserted almost anywhere (even in the cul-de-sac) in order to

stay away from previous operative scars, etc. If on observation, one has inadvertently insufflated the supraperitoneal space, one needs only to let this CO_2 out by inserting the Verres needle into this space, thus allowing the trapped CO_2 to escape. The Verres needle is then reinserted at another site.

3. The laparoscope lens need not be heated to prevent fogging. All one needs to do is touch the distal lens against the top of the uterus or loop of the bowel and leave it a second to equalize the temperature between the scope lens and the intra-abdominal cavity and the visual field will be very clear.

4. The operating trocar must be inserted under direct vision and its insertion carefully controlled so as not to damage any pelvic structures.

5. Weight is not a problem. In our original small series, a weight of 170 pounds was considered the maximum for performance of this procedure. Experience belies ones aversion for fat and the obese patient is many times easier to operate on than is the "semi-fat" patient. Several have been performed in the 250-pound range with no problems at all.

6. The electro surgical equipment must be checked carefully and often by the operator to include (a) the presence of adequate grounding, (b) good electrical connection, and (c) proper function of the electro surgical unit. All metal trays, instruments, etc., should be kept at a safe distance from the patient to dispel any possibility of grounding to these structures.

7. It is imperative that one group of operating room personnel take care of the laparoscopic equipment, that all equipment be checked just prior to surgery to insure its normal function, and that the equipment be cleaned immediately after the procedure. If possible, it is good to have a laparoscopic team for these procedures where all the members of the "team" are thoroughly familiar with the function of the equipment and the performance of the procedure.

Conclusion

Laparoscopic tubal coagulation and the use of the laparoscope for diagnosis have become invaluable parts of the gynecologist's armamentarium. It is, however, not a "simple" procedure and should never be explained to the patient in that manner. It is a complicated, potentially dangerous procedure that should be used only by experienced operators. Each patient should be made aware of the possible major complications prior to the performance of the operation.

The patient's hospital stay is very short (50% are done on an out-patient basis now) and the period of recuperation is a matter of a few days. It is our considered opinion, in view of the excellent results obtained, that at the present time, this is the procedure of choice for permanent sterilization in the female.

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Knee Arthrography, A Diagnostic Aid in Internal Derangement of the Knee

C. Dale Brown, M.D.* and David P. Thomas, M.D.**
Paducah, Kentucky

e installation of radiographic contrast dium into the knee and subsequent x-ray mination provides the clinician with a uable diagnostic test. Like myelography, examination often confirms what is ically known, but can supply important litional information. Arthrography, as ll as other diagnostic knee procedures discussed.

RTHROGRAPHY of the knee is a diagnostic modality too infrequently utilized in the evaluation of internal derangement of knee. A safe and uncomplicated procedure, rography has proven to be accurate and inable in the diagnostic workup of knee disor-. It can be performed on an out-patient basis o longer time than that required for intestinal um studies.

linical diagnostic accuracy of internal dement of the knee has been reported to be een 50% and 80%.[1] Conservative estimates cate that 20% of menisci surgically removed normal.[2] This is a disturbingly high figure, reveals a clinical inability to preoperatively ss and accurately identify all meniscal lesions. ral complimentary examinations have been are being devised to aid the clinician and im- e accuracy.

rthrography is not a new procedure. It was introduced by Werndorff and Robinson in 5.[1] Only recently has increased interest in ography and improved techniques and pment permitted acceptable preoperative acy.

positive contrast arthrography with and without air insufflation into the joint, demonstrates

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FIG. 1. A normal medial meniscus. The triangular cartilage is surrounded (arrows) by contrast medium. Note the smooth contoured borders formed by the articulating femoral and tibial condyles and the acute inner edge (black arrow).

medial meniscus lesions accurately in 93%[3] to 97%[4] of patients. Lateral meniscus lesions are more difficult to interpret with about 75% overall accuracy.[5] The entire intra-articular meniscus is outlined with contrast medium and utilizing multiple x-ray projections and tube angulations, the inferior surface as well as both anterior and posterior horns are viewed in profile (Fig. 1). Cruciate ligaments can also be demonstrated on routine films but are difficult to evaluate.[6] Lateral tomography of the cruciates has been advocated, and we have found this quite useful in cases of cruciate ligament distortions and interruptions.[7] Medial and lateral collateral ligaments, as well as capsular disruptions, are readily seen (Fig. 2). Lesions involving the articular cartilage of the patella and tibial and femoral condyles, such as osteochondritis dissecans, are difficult to see at best, and only if a cartilage fragment has avulsed and lies free in the joint can it be visualized.

There is essentially no morbidity with arthrography and only few complications have been recorded. These include an occasional allergic reaction to the iodine contrast medium, post-procedural effusion, and pain. The only recognized



FIG. 2. Severe trauma, as seen in this football injury, may involve the medial meniscus, coronary ligament, medial capsule and medial, collateral ligament (black arrow). All the medial knee structures have been torn allowing contrast medium to escape beyond the joint confines into the medial soft tissues (white arrows).

contraindications are allergy to the contrast medium, bleeding diathesis, and septic arthritis.[2]

Methods and Materials

Under aseptic technique and local infiltration of the skin with 4 cc of 2% Xylocaine, a 20 gauge needle is inserted into the knee joint lateral to an arbitrary site 6 cm cephalad to the knee joint line. If an effusion is present, this is aspirated as completely as possible followed by 6 cc to 8 cc injection of Renografin 76. If double contrast arthrography is performed, 4 cc of contrast medium is injected and 30 cc of air or medical grade CO_2 insufflated. The needle is withdrawn and the knee tightly wrapped with an ace bandage from the suprapatellar bursa to the joint line. The patient is exercised with active flexion and extension followed by fluroscopic examination.

Stringent knee stress maneuvers are manually performed under visual control. Six to twelve spot films of each meniscus are obtained in neutral and stress positions, and are carefully examined as developed.

It is important to visualize the lateral meniscus from the P A or patient prone position to eliminate the overlapping of contrast medium in the popliteus tendon bursa. The P A position is imperative in demonstrating a discoid meniscus.[8] The contrast medium absorbs quickly through the synovial membrane, and any repeat films must be made expediently. A small amount of epinephrine injected with the contrast medium delays synovial absorption and permits more time for repeat films. The knee is then unwrapped and the patient passively exercised on the table. This facilitates filling of popliteal cysts and encourages extravasation in capsule and ligament ruptures. If by history, there is a possibility of a cruciate tear, tomography is quickly performed. For this procedure to be accurate and successful, the physician must be interested in, and hopefully performing several of these examinations each week.

Anatomy

The knee is the largest articulating joint in the body. It is a combined hinge (ginglymus) and pivot (trochoid) joint providing flexion, extension, and rotary motion. The knee is extremely complex in its construction possessing four ligaments, two menisci, a joint capsule, and adjacent musculature all working together to insure stability and normal motion. Medial-lateral stability is provided by the



FIG. 3. The medial meniscus tear is vertical in orientation and extends through the entire meniscus separating it into two segments. This basketball player was disabled by the injury and had repeated knee aspirations by his local physician before referral.

medial and lateral collateral ligaments. The medial collateral ligament is composed of complimentary deep and superficial layers, both arising from the midfemoral epicondyle. The superficial layer is approximately four inches long and inserts into the proximal tibia. The deep layer is shorter and inserts into the proximal tibia at the margin of the tibial condyle. The deep layer is also attached to the medial meniscus and often is injured with peripheral meniscus lacerations.

The lateral collateral ligament rises from the lateral femoral epicondyle and inserts into the head of the fibula. This ligament does not attach to the lateral meniscus and is separated from it by the joint capsule and the popliteus tendon. This anatomical arrangement of the lateral meniscus is responsible for reducing arthrography accuracy.

Anterior-posterior stability is provided by the two cruciate ligaments. The anterior cruciate arises from the anterior intercondylar area of the tibia, passing obliquely upward and backward to attach to the lateral side of the intercondylar fossa of the lateral femoral condyle. The posterior cruciate originates from the posterior intercondylar ridge of the tibia, passes behind the anterior cruciate, upward and forward, and attaches to the medial side of the intercondylar fossa.

The menisci are two crescent-shaped plates composed of fibrocartilage. They are triangular or wedge-shaped in cross section, with a wide base facing externally. The medial meniscus is the smaller of the two forming a "C", while the lateral almost forms an "O". They are attached along their entire periphery to the tibial condyle margin by a short fibrous extension, known as the coronary ligament. The menisci functions to deepen the tibial surface area upon which the femoral condyles move. They act as shock absorbers between the tibial and femoral condyles, distributing and absorbing tremendous pressures within the fibrocartilage. They may also help in distribution of the synovial fluid within the joint, and it has been postulated that the meniscus prevents interposition of capsule and synovium between the tibial and femoral condyles. They are relatively avascular structures except at the peripheral attachment and rarely hemorrhage when torn.

Each meniscus has some limited mobility. With flexion, migration occurs posteriorly, and with extension the meniscus moves forward. The mobility of the medial meniscus is less than the lateral because of the firm medial meniscus attachment to the medial collateral ligament. The increased excursion and mobility of the lateral meniscus makes it less accident prone.



FIG. 4. This medial meniscus laceration is filled with contrast medium. The tear extends obliquely through the midmeniscus and presents an uneven articular surface for the femoral and tibial condyles.

Results

During 1975, 246 knee arthrograms were performed (Table 1). Surprisingly, side and sex distributions were equal. It appeared clinically and from day to day experience that more males and right knees were being examined. However, this was not the case. The athletic and industrial knee accidents uniformly were more severe, some requiring extensive reconstructive surgery. With the moderate trauma of football contact, it was presumed that more knee injuries would be associated with this sport. Not so. Basketball, including the sand lot variety, presented with just as many knee injuries (Fig. 3). This was thought to be due to the greater numbers participating in basketball.

Reflecting the national and state interest in women's athletic programs, six arthrograms were performed on females injured in organized athletic endeavors (Fig. 4). This figure may increase as more emphasis in women's sports develops.

Sixty-four per cent of arthrograms showed clearly visible abnormalities. Of all arthrograms

performed, 52%, or slightly over one half, had medial meniscus and or adjacent structure, i.e., coronary ligament, medial capsule, meniscus capsule attachment damaged. The distribution of other abnormalities is seen in Table 1 and represents a gamut of surgical and nonsurgical knee disorders.

Discussion

The clinical diagnosis of internal derangement of the knee is often difficult. Many times, the presenting symptoms and complaints mask additional pathology or injury, which is precedent to or concomitant with the acute injury. Twenty per cent of menisci removed are normal.[2] Unnecessary and indiscriminate meniscus removal should be avoided. The uninjured meniscus is important in prolonging normal knee function, and its preservation is essential. Severe peripheral meniscus tears rarely heal, (Fig. 5) and we, as others, have found a high incidence of early unicompartmental degenerative disease, if the damaged meniscus remains within the joint.

Conversely, long-term follow up studies of post-menisectomy knees have also shown a high incidence of degenerative changes. In 1967, Jackson reported that 23% of post-menisectomy knees had degenerative x-ray changes, compared to 5% in the contralateral knee.[9] Tapper reviewed a series of knees 10 years post-menisectomy and found 85% with radiographic evidence of degeneration beyond that normally expected.[10]



FIG. 5. A jagged laceration has developed along the inferior medial meniscus near the periphery. Small lacerations at the meniscus-capsule attachment will often heal. However, a deep, widely separated tear such as this has little chance for recovery.

Table 1

ARTHROGRAPHY STUDIES 1975

Total Knees Examined	246
Right	124
Left	122
Males	129
Females	117
Normal	87
Medial Meniscus Injury	99
Capsule Meniscus Attachment Separation	18
Capsule Rupture Without Meniscus Injury	6
Capsule Rupture With Meniscus Injury	11
Collateral Ligament Tear	5
Popliteal and Rheumatoid Cysts	6
Lateral Meniscus Injury	21
Cruciate Ligament Lacerations	4
Osteochondritis Dissecans	11
Degenerative Arthritis	10
Loose Bodies	3
Fractures	3
Coronary Ligament Lacerations	12
Discoid Meniscus	3
Venous Malformation	1
Chondrocalcinosis	1

The degenerative process is accelerated in patients retaining a severely damaged meniscus, therefore, removal is imperative. Patients in their teens and early twenties must, by arthrography, have a moderately damaged meniscus or be unimproved during a course of conservative management before the meniscus is removed. These young individuals will have many menisectomy years for degenerative development, and the surgical decision should be based on the severity of the injury and the likelihood of early articular degeneration. Each patient is carefully evaluated and the course of therapy devised from the arthrographic and clinical findings.

Arthroscopy, a relatively new procedure, has proven to be another useful diagnostic tool with an accuracy of 90% to 98%.[1] This procedure permits excellent evaluation of the patella, cruciate ligaments, femoral articular surfaces, and anterior portions of the menisci. A limitation of arthroscopy is failure to visualize the undersurface and posterior peripheral portion of each meniscus. Unfortunately, the procedure must be done in the operating room under general anesthesia, thus, anesthesia risk is added to the diagnostic test. This is undesirable in our institution. Although favored in some medical centers, acceptance has not been widespread.

Preoperatively, the impression may center on



5. Occasionally a postoperative knee does not perform
ticipated. A metallic staple (clear arrow) has been
d into the medial tibia. At the initial surgery the
us was thought to be intact, however a postoperative
gram obtained one year after surgery reveals a vertically
d laceration of the medial meniscus (black arrow).

nterarticular structure. A series of 800 con-
ive knee evaluations, carried out by Dandy
Jackson, compared clinical impressions and
oscopy findings. In their study, 32% avoided
ry, 27% had a different procedure per-
d, with 41% having no change from the
clinical impression. The report revealed
51% of their routine orthopedic cases had
treatment altered by means of additional
ostic studies.[1]

e recent introduction of the needle arthro-
may improve visualization of the more dif-
areas within the knee. We await further re-
on this out-patient surgical technique.

arthrotomy, certain limitations exist as to
can be seen through the incision. From an
or approach, the posterior horn of the
eral meniscus cannot be visualized ade-
quately. The opposite meniscus is likewise difficult to examine from a single incision, therefore, direct visualization of both menisci must be accomplished through bilateral incisions. Bilateral incisions lengthen convalescence, and with arthrography, we have all but eliminated the contralateral "exploratory incision".

Conclusion

Arthrography is a simple and accurate procedure, capable of demonstrating abnormalities of the menisci, cruciate ligaments, medial and collateral ligaments, and capsule of the knee. This procedure compliments a good clinical evaluation and greatly improves diagnostic and therapeutic capabilities.

Acknowledgment

The authors would like to thank Melvin Croft and Roscoe Howard for their technical expertise, and Glenda Adkins for her appraisal and preparation of the manuscript.

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GRAND ROUNDS

University of Louisville School of Medicine

This Journal feature will be presented alternately by the University of Louisville and the University of Kentucky Departments of Medicine and Departments of Surgery. We hope to have these features revolve around subjects of immediate practical interest to the practicing physician; and, for those of us not able to attend grand rounds in the teaching centers as often as we might, we hope this will represent a bit of a refresher course.

Dysfunctions of Esophageal Motility*

DISTURBANCES of motility are relatively uncommon and until recently have been poorly understood. The illness of one patient recently seen at the University of Louisville Affiliated Hospitals will be presented along with a review of reports of similar motility disturbances.

Case Report

In early January, 1976, a 74-year-old farmer presented with a three-year history of difficulty in swallowing which had worsened progressively. The patient described the sensation "like swallowing wind." There was no difference between liquid and solid food; both lodged in the midsternum. If he swallowed two or three times, he usually got a sudden release and the food went on down. Occasionally he regurgitated undigested food and had experienced two episodes of aspiration. He did not complain of nocturnal regurgitation or heartburn. He had gained weight in the last six months which he attributed to decreased work. Two years before this admission he had had an upper gastrointestinal series which was interpreted as normal. He had been discharged recently from another hospital where upper gastrointestinal series disclosed high-grade esophageal obstruction in the distal esophagus and heavy esophageal peristalsis with later relaxation of the cardioesophageal sphincter.

The patient's history disclosed an early appendectomy, bilateral inguinal herniorrhaphy, and treatment for tuberculosis (1969-1972). In 1972, arteriosclerotic cardiovascular disease was diagnosed. It was manifested by congestive heart failure.

Physical examination was unremarkable except for occasional extra systoles, a slightly enlarged heart, and a gallop (S_4). Laboratory data were within normal limits except for occasional premature ventricular contractions.

Fiberoptic esophagogastroscopy was unremarkable except for some spasm at the esophagogastric junction. Barium swallow showed marked contractions with very little barium going through the esophagogastric junction. A cine-esophagogram showed marked hyperperistalsis of the esophagus.

On January 13, 1976, the patient underwent long esophagomyotomy from the aortic arch to below the gastroesophageal junction and modified Belsey antireflux procedure. The longitudinal and circular muscles of the esophagus were markedly hypertrophied. His postoperative course was complicated by hypertension, bigeminy, and congestive heart failure which responded to diuretics, oxygen, and digoxin. Presently he swallows normally and postoperative cine-esophagogram shows complete resolution of esophageal spasm.

Discussion

Operations for esophageal disorders have been anatomically oriented until relatively recently. The development of new investigative and diagnostic techniques during the past 25 years has proved a new dimension to the art. As a result, the details of normal and abnormal esophageal function are being clarified and operations can more intelligently be directed.

To understand the abnormal esophagus, the normal function of the esophagus must be appreciated. The details of normal esophageal function have been clarified by the techniques of esophageal manometry primarily developed in

From the Department of Surgery, University of Louisville School of Medicine, Louisville

the laboratories of Code and Schlegel[1] and of Ingelfinger.[2] At the upper end of the esophageal tube is a band of elevated pressure about 2.5 cm in length with a mean maximal pressure of about 40 cm of water. At the beginning of deglutition pharyngeal pressure rises, and the resting pressure of the upper sphincter decreases. Immediately thereafter sphincter contraction occurs, and the primary peristaltic wave of the esophagus is initiated. This wave traverses the body of the esophagus in a uniform fashion, with intensity varying from 50 to 100 cm of water. Pressure records from the esophagogastric junction demonstrate another zone of elevated pressure: the inferior esophageal sphincter. The sphincteric relaxation shortly after swallowing is followed by a wave of high pressure as peristalsis rolls through the sphincter. The inferior esophageal sphincter is the major mechanism which prevents reflux of gastric contents into the lower esophagus and maintains a basal sphincter pressure around 15 mm Hg.

Endogenous gastrin released by a protein meal, beef hydrolysate, or glycine has been shown to increase sphincter strength, as has exogenous administration of gastrin. Other physiologic substances that increase lower esophageal sphincter tone are acetylcholine and norepinephrine. Cholecystokenin, secretin, and glucagon decrease the lower esophageal sphincter tone in man. A low pH of the gastric fluid is also associated with reduced sphincter pressure.

Motility disturbances of the esophagus can be divided into two anatomic and functional locations: those involving the upper esophageal sphincter and those involving the body of the esophagus and lower sphincter.[3,4] The majority of problems of the upper sphincter center around the incoordination of the normal swallowing mechanism. There is an abnormal temporal relationship between pharyngeal esophageal sphincteric relaxation and contraction. The causes for esophageal motility disturbances of the upper sphincter are listed in Table 1. Ardran and Kemp in 1961[5] and Ellis in 1971[6] demonstrated by manometric studies that patients with pulsion diverticulum show an early closure of the cricopharyngeal muscle before the act of swallowing is completed. Dohlman and Mattsson[7,8] demonstrated dysfunction of the cricopharyngeal muscle in patients with pulsion diverticulum and recommended cricopharyngeal myotomy. It is now recommended that cricopharyngeal myotomy be performed to complement resection of Zenker's pulsion diverticulum.[9]

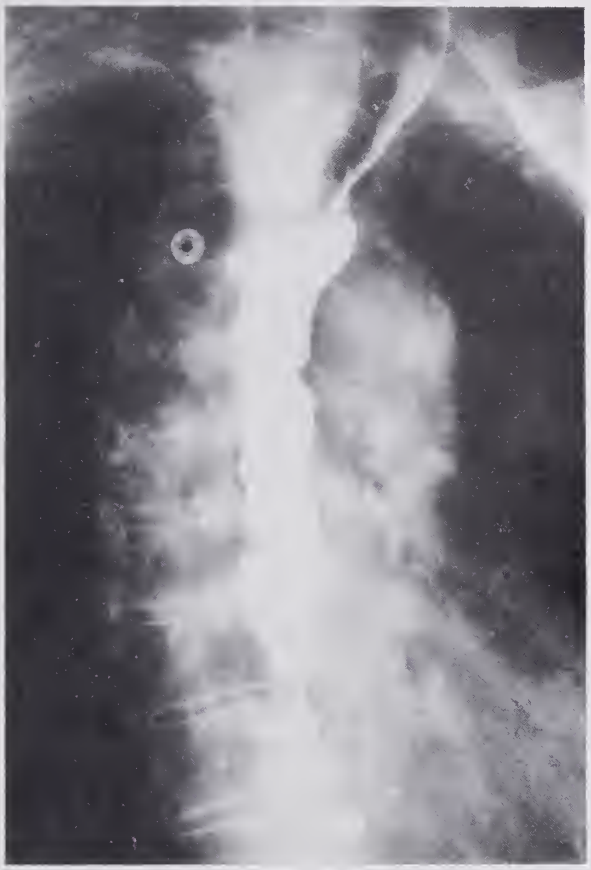


FIG. 1. Radiographic examination after barium swallow shows marked contractions.

More recently cricopharyngeal myotomy has been advocated for patients with central nervous system and muscular disease who have dysphagia and a history of aspiration. The results of cricopharyngomyotomy for these patients have been generally good, although no large series have been reported.[10]

Motility disturbance of the esophageal body and lower sphincter can be divided conveniently into those characterized by hypomotility and those characterized by hypermotility, plus an additional group of miscellaneous conditions about which less is known. The classic example of **hypomotility** disturbance is esophageal achalasia. It is characterized by an absence of peristalsis in the body of the esophagus and by failure of the inferior esophageal sphincter to relax in response to swallowing.[11,12] The term "vigorous achalasia" refers to a patient whose disease has not yet reached the advanced stage of megaesophagus and whose esophagus retains considerable contractile power. The causes of hypotensive inferior

sphincter include achalasia, hiatal hernia, scleroderma, operations on the cardia, and idiopathic conditions. The major problems of patients with hypotensive inferior sphincter are reflux and its complications. It is becoming more and more evident that the anatomic hiatal hernia is really not the problem. Many people who have hiatal hernia demonstrated anatomically on an upper gastrointestinal series are asymptomatic. An occasional patient has symptoms of hiatal hernia with demonstrated esophagitis on esophagoscopy but without anatomic evidence of a hiatal hernia. The key to understanding symptomatic hiatal hernia is pathophysiologic: those patients with symptoms have incompetent esophagogastric sphincter mechanisms.

The vast majority of patients (95%) with symptoms from reflux can be treated medically with elevation of the head of the bed, protein-rich, fat- and carbohydrate-lean diets, avoidance of alcohol and nicotine, and antacid therapy. Anticholinergic drugs are potentially harmful because these drugs reduce sphincter pressure. Patients with esophagitis, stricture, ulceration, hemorrhage, and recurrent aspiration should undergo operation to prevent reflux. The best results have been obtained with the Nissen fundoplication.[13-16]

The most common **hypermotility** disturbance is that of diffuse spasm of the esophagus, a condition which is often associated with a hypertensive inferior esophageal sphincter. Rarely will instances of localized spasm of the body of the esophagus be encountered. The differentiations between achalasia and diffuse spasm can usually be made clinically. Patients with achalasia usually do not have pain and almost always have obstructions. Retention and regurgitation are common, in contrast to patients with diffuse spasm. Some patients with diffuse spasm have obstruction, but it is much less common than with achalasia. The unusual patient with vigorous achalasia may have confusing symptoms. If the clinical and radiologic findings are confusing, manometric studies generally are diagnostic. Patients with diffuse spasm demonstrate simultaneous repetitive and prolonged contractions of excessive magnitude in the lower half or third of the esophagus after swallowing. The sphincter relaxes normally in contrast to esophageal achalasia in which the sphincter fails to relax.[4,17-19]

Although some people still recommend dilatation of the lower esophageal sphincter for achalasia, the Heller esophagomyotomy is generally considered the best treatment. The results have been good in more than 80% in most series.[11,12,20]

The treatment for diffuse spasm of the esophagus is prolonged esophagomyotomy to well above the area of visible disease. This may require a myotomy up to the aortic arch. The results of esophageal myotomy have not been quite as good for diffuse spasm as for achalasia. Ellis reports a 78% improvement with most results in the excellent and good categories.[21] An antireflux operation should be combined with the esophagomyotomy to preclude significant postoperative gastroesophageal reflux.

EUGENE SHIVELY, M.D.
HIRAM C. POLK, JR., M.D.

Table 1

DISTURBANCE IN MOTILITY BY ANATOMIC LOCATION*

Upper sphincter
Central nervous system disease—e.g., multiple sclerosis
Muscular disease—e.g., myasthenia gravis, dermatomyositis
Oropharyngeal operation
Idiopathic lack of coordination—e.g., Zenker's-diverticulum
Esophagus and lower sphincter
Hypomotility—e.g., achalasia, hypotensive inferior sphincter
Hypermotility—e.g., diffuse esophageal spasm
Miscellaneous—e.g., dermatomyositis, cerebrovascular accident

*Modified from Ellis, F. H., Jr.: Motility disturbances of the esophagus: A working classification with remarks on surgical management. R. I. Med. J. 56:496, 1973.

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The authors wish to acknowledge the assistance of John Schupbach, M.D., of Owensboro, and Robert L. Fulton, M.D., of the Department of Surgery, in the care of this patient.

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In Appreciation To Walter I. Hume, Jr., M.D.

WHEREAS, Walter I. Hume, Jr., M.D., of Louisville, Kentucky, served on the Editorial Board of *The Journal of the Kentucky Medical Association* in the position of Assistant Editor from 1966 until 1970, and

WHEREAS, he then assumed the increased responsibility of serving as its Editor from 1970, through September, 1976, and

WHEREAS, he has given untiringly and unselfishly of his time and talents over the past eleven years to provide a quality medical journal for the members of this Association, and

WHEREAS, in addition to his position on *The Journal* board, he has served on and chaired numerous KMA committees, to include the Medical Education Committee, the Health Care Delivery Committee, and the Ad Hoc Committee on Health Care Costs, and

WHEREAS, he continues to work through organized medicine in a devoted and sincere manner for the well being of the entire medical profession, now therefore be it

RESOLVED, that the Board of Trustees of the Kentucky Medical Association hereby expresses its sincere thanks and deep appreciation to Walter I. Hume, Jr., M.D., not only for his outstanding work on *The Journal,* but also for his diligent service to the Kentucky Medical Association, the Jefferson County Medical Society, and the entire medical profession of Kentucky, and be it further

RESOLVED, that this Resolution become an official part of the proceedings of the Kentucky Medical Association Board of Trustees, meeting in Louisville, Kentucky, September 26, 1976, and that a copy of this Resolution be tendered to Doctor Hume at a time and place deemed appropriate by the Board.

EDITORIAL

A Salute to Doctor Hume

For the past 11 years *The Journal* has been fortunate to have had the wise counsel and guiding hand of Walter Hume on its editorial board. Serving first as an Assistant Editor from 1966 until he became Editor in 1970, Doctor Hume has worked diligently to make *The Journal* a vital part of the Kentucky Medical Association and a dependable medical informational source for its members.

Doctor Hume's interest and involvement in the affairs of organized medicine are reflected in his editorial writings; his goals have been to stimulate thought, to put forth new ideas, and to provide the membership with a sounding board for their own ideas. It has been the privilege of those who have served with him on the editorial board to see him accomplish many of these goals during his tenure as Editor.

A physician first, Doctor Hume is a 1949 graduate of Harvard Medical School and practices general surgery. A teacher, he has given instruction to medical students at the University of Louisville since 1956 and now holds the position of Clinical Associate Professor of Surgery. A leader, Doctor Hume has held numerous positions including the presidency of the Jefferson County Medical Society and the Louisville Surgical Society; Board membership on OVRMP, KPRO, Falls Region Health Council, Kentucky Physicians Mutual; chairmanship of KMA's Medical Education Committee, Health Care Delivery Committee, and Ad Hoc Committee on Health Care Costs. A writer, he has penned some 32 editorials and five scientific articles for *The Journal of KMA* alone.

His accomplishments serve to accentuate his deep belief that physician involvement is not an "extracurricular" activity but a necessity. We are honored that his involvement found its way into the workings of *The Journal.*

And now, as Doctor Hume steps down from his position on the editorial board, we are confident he will continue to serve the interests of the medical profession. Thank you, Walter.

THE EDITORS

A Paradox

An astute observer once said "Life is full of paradoxes!"

The past decade or two has seen the banding together of groups of individuals in increasing numbers, recognizing that in organization there is strength—strength to achieve their goals, to broadcast their message, to promote their special interests, or to preserve what they perceive as rightly theirs.

To cite only a few, we have seen the development of organizations of women, of welfare recipients, of students, of tenants, of organizations based on race or ethnic origins, and even one of nuns. Some of these newer organizations have grown and become powerful voices in our society because their cause is just or, perhaps, only because of the dedication and unity of the members in fighting for the best interests of the group.

There are other organizations, of course, which have been around for a long time — labor unions, professional associations, business groups, political organizations, and the like. These, too, exert a powerful influence on society as we know it today.

Most of these organizations continue to grow because individuals realize that there is strength in numbers, and power when those numbers are organized in a solid front.

Isn't it paradoxical, then, that at a time when unity and strength are so essential to preserve what one feels is right, an observer might get the impression that Medicine seems bent on destroying itself!

It seems incredible that there are some within our profession who would undermine the very framework of Organized Medicine. Incredible, but true! There are some in our midst who even question the relationship between the County Medical Society and KMA, suggesting that each county society function as an independent organization! They would thus weaken the relationship between KMA and AMA, by lowering membership in KMA, and thus reducing our representation on the national level.

It is true that these individuals constitute a very small, but vocal, minority of our members, but their proposals have a divisive and disruptive influence on those who, like themselves, have never participated in organized medicine on the state or national level, have rarely served on a committee or held an office, and seldom attend a meeting. They have closed their eyes and their ears to what KMA and AMA have done, and are doing every day, in their behalf and in the interest of their patients.

Who was it that said "We have met the enemy and they is us!"

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From The Editor's Notebook

Tobacco Season
Where There's Smoke There's Fire

In our state where tobacco is the number one crop and cigarette manufacturing a major industry, there has developed murky clouds of confusion and intense heat of controversy about the subject generally and the significance of the warning on all packs of cigarettes: "The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health." (And to emphasize the gravity and sanctity of the statement, the first letter of each word is capitalized with the sole exception of the only and lowly preposition!)

Some confusion begins when I read that same warning prominently displayed even in the full page advertisements for cigarettes that urge me to "try a pack of ————" and assure me that "you'll enjoy smoking." I learn that "cigarette consumption in the country continues to rise at a rate of two to three per cent per year,"[1] but "the percentage of adult smokers has decreased in the past decade."[3] More confusion? Cryer[3] et al note that acute coronary-heart disease events are associated with cigarette smoking and that such a practice may trigger these events in patients with coronary-artery disease—even the development of lethal cardiac arrhythmia.

In another study[4] there was evidence "that smoking is a cause of secondary erythrocytosis and should be considered in the evaluation of polycythemia. . . . ." In the same article it was noted that (1) "3% of all smokers have elevated hematocrit values," (2) "the erythrocytosis in smokers is evidence that chronic exposure to carbon monoxide results in significant tissue hypoxia" and (3) "precipitation of anginal attacks as a result of exposure to carbon monoxide is the result of tissue hypoxia." And in another article relating to pulmonary function[5] there was "a clear admonition to discontinue smoking would seem preferable to a monitoring of pulmonary function to ascertain the point when smoking becomes hazardous."

All of these studies may be classified as being controversial and I am not going to get into the big controversy that involves smoking and lung cancer, but back to current trends[2]: most smokers have tried to stop smoking but 57% say they will be smoking five years from now, and more than three out of four persons indicate that teachers, doctors, and other health professionals should set an example by not smoking. Since we doctors are the number one health professional we should learn so our teaching would be exemplary.

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The Doctors Moore

I read in *The Courier-Journal* (Friday, 10 September) of the death of Roy Henry Moore III and his obituary is included in this issue of *The Journal*. He was a 1972 graduate of the University of Louisville School of Medicine and represented for his family and the school a fourth generation graduate. His great grandfather had graduated in 1870 and practiced in Webster County. His grandfather graduated in 1910 and his father, a distinguished Louisville surgeon, graduated in 1939. The University of Louisville and its School of Medicine should be proud of this distinguished group of physicians. They and this impressive legacy were appropriately recognized by the Medical School Alumni at the University of Louisville's dedication of the Health Science Center on Sunday, 4 April 1971.

It is regrettable that such a fine lineage should end untimely. With pride in these men and for their contributions in Kentucky medicine, we express sincere sympathy to the family.

Flu

The flu season is upon us and the most frequently-asked question concerns the immunizations that have been proposed and recommended for this dread disease. The geographic designation of the several varieties of flu viruses involved have been interesting as well as confusing. We have Spanish, Hong Kong, Asian, Victoria, and New Jersey or "swine flu."

While we prepare to deal with flu problems prophylactically via the National Influenza Immunization Program we hope that influenza will not become widespread nor make history as an epidemic did in the past. Nancy D. Baird records some local history relative to influenza in her treatise "The 'Spanish Lady' in Kentucky" (1918-1919) that was a feature in a recent Filson Club Historical Quarterly (Volume 50: 290-301, July 1976).

It is an interesting story told exceptionally well about the epidemic in Kentucky. The statistics were impressive also: Flu killed 15,000 and weakened 300,000 in the Commonwealth. There was also a dramatic increase in deaths due to pneumonia and tuberculosis attributed directly to the attacks of influenza.

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Description: Each Anusol-HC Suppository contains hydrocortisone acetate, 10.0 mg; bismuth subgallate, 2.25%; bismuth resorcin compound, 1.75%; benzyl benzoate, 1.2%; Peruvian Balsam, 1.8%; zinc oxide, 11.0%; also contains the following inactive ingredients: bismuth subiodide, calcium phosphate, and coloring in a bland hydrogenated oil-cocoa butter base.

Each gram of Anusol-HC Cream contains hydrocortisone acetate, 5.0 mg; bismuth subgallate, 22.5 mg; bismuth resorcin compound, 17.5 mg; benzyl benzoate, 12.0 mg; Peruvian Balsam, 18.0 mg; zinc oxide, 110.0 mg; also contains the following inactive ingredients: propylene glycol, bismuth subiodide, propylparaben, methylparaben, polysorbate 60, sorbitan monostearate in a water-miscible base of mineral oil and glyceryl monostearate. Non-staining.

Indications: Anusol-HC is adjunctive therapy for the symptomatic relief of pain and discomfort in: external and internal hemorrhoids, proctitis, papillitis, cryptitis and fissures, incomplete fistulas, and relief of local pain following anorectal surgery.

Anusol-HC is especially indicated when inflammation is present. When acute symptoms subside, most patients can be maintained on regular Anusol® Suppositories or Ointment.

Contraindications: History of sensitivity to any component. Topical corticosteroids should not be employed in tuberculous, fungal and most viral lesions of the skin (including herpes, vaccinia and varicella).

Warnings: The safe use of topical steroids during pregnancy has not been fully established. Therefore, during pregnancy they should not be used unnecessarily on extended areas, in large amounts or for prolonged periods of time.

Precautions: Symptomatic relief should not delay definitive diagnoses or treatment. When there is bacterial skin infection, topical corticosteroids should be used only with appropriate concomitant antimicrobial therapy. Prolonged or excessive use of corticosteroids might produce systemic effects.

Dosage and Administration: Anusol-HC Suppositories: Remove foil wrapper and insert into the anus. One suppository in the morning and one at bedtime, for 3 to 6 days or until inflammation subsides. Then maintain patient comfort with regular Anusol.

Anusol-HC Cream: Adults—Remove tube cap and attach the plastic applicator. After gentle bathing and drying of the area, apply to the exterior surface and gently rub in. For internal use, insert the applicator by applying gentle, continuous pressure. Then squeeze tube to deliver medication. Cream should be applied 3 or 4 times a day for 3 to 6 days or until inflammation subsides. Then maintain patient comfort with regular Anusol.

Supplied: Anusol-HC Suppositories—boxes of 12 (N 0047-0089-12) suppositories in silver foil strips with (WC) printed in black.

Anusol-HC Cream—one-ounce tube (N 0047-0090-01) with plastic applicator; detachable label.

Full information is available on request.

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(WC) Division,
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New Jersey 07950

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- without CNS stimulants



Artist's interpretation in bas-relief of external hemorrhoids, postoperative anorectal wounds and anal dermatitis.

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ORGANIZATION SECTION

Allergy Symposium To Be Held Oct. 20-21 in Louisville

Dates for the Second Annual Symposium on Current Trends in Allergy and Immunology are October 20-21. The symposium, to be held at the Health Sciences Center auditorium of the University of Louisville School of Medicine, will feature presentations by faculty of the University of Louisville and guest speakers, Payton A. Eggleton, M.D., Charlottesville, and J. Christopher Frolich, M.D., Nashville.

Doctor Eggleton, Assistant Professor of Pediatrics at the University of Virginia Medical Center, will speak on "Special Problems with Asthmatic Pediatrics," and "Theophylline Pharmacodynamics." An Assistant Professor of Internal Medicine and Pharmacology at Vanderbilt University, Doctor Frolich's topic is "Prostaglandins in Lung Disease."

The symposium has been approved for 8 hours of Category I credit and .8 CEU's. Eight hours of credit have also been requested from the AAFP. There is a $50 fee for the two-day session.

For registration and further information contact the Office of Continuing Education, University of Louisville School of Medicine, (502) 588-5329.

Resolution on Medicaid Fraud Passed by AMA House

The following resolution was adopted by the AMA's House of Delegates at the 1976 Annual Convention held in June in Dallas:

"The American Medical Association condemns and deplores all acts of fraud and wrongdoing, including in particular any wrongful acts as recently reported in the Medicaid and Medicare programs. We urge that responsible government agencies proceed with all due speed in the prosecution under the provisions of due legal process of all who are charged with guilt of fraudulent misconduct. We will continue to offer our cooperation and assistance in bringing to an end such activities."

UL Sets December 6 As Date For Hypertension Program

"Diagnosis and Office Management of Hypertension" is the topic for a one-day symposium to be held December 6 at the Marriott Inn in Clarksville, Indiana. Sponsors of the meeting are the Hypertension Unit, Section of Cardiology, University of Louisville School of Medicine, and the Council on Cardiology of the American Heart Association.

Members of the guest faculty who will appear on the program with University of Louisville faculty participants are : Albert N. Brest, M.D., Professor of Medicine at Thomas Jefferson University Hospital in Philadelphia; Edward D. Frohlich, M.D., Vice President, Research and Education, Alton Ochsner Medical Foundation, New Orleans; and Roger B. Hickler, M.D., Professor of Medicine, The Commonwealth of Massachusetts, University of Massachusetts, Worcester.

A $20 registration fee for physicians will be charged for the program which is acceptable for 8 hours each of Category I by the AAFP and the AMA Physicians Recognition Award.

Registration must be made by November 22, 1976, with the University of Louisville School of Medicine, Section of Cardiology, Hypertension Unit, Medical-Dental Research Building, Louisville, Kentucky 40201.

Annual Meeting To Be Featured In November Journal

The 1976 Annual Meeting of the Kentucky Medical Association was being held in Louisville when this issue of *The Journal* went to press.

Full details of the convention will be featured in the November issue. Information on the new officers and trustees as well as attendance figures and actions of the House of Delegates will be highlighted next month.

The **Joint Commission on Accreditation of Hospitals** is presently recruiting full- and part-time physician surveyors for its hospital accreditation program. Physicians interested in applying, or those seeking further information, should contact: Surveyor Procurement Office, Joint Commission on Accreditation of Hospitals, 875 N. Michigan Ave., Chicago, Illinois 60611.

In Memoriam

RANDALL D. COLLINS, M.D.
Whitesburg
1900-1976

Randall Dow Collins, M.D., public health physician, died on May 8 at the age of 75. A 1927 graduate of the University of Louisville School of Medicine, he practiced in Whitesburg for 36 years. He was a former member of the Kentucky Medical Association.

WILBURN P. CLIFTON, M.D.
Barbourville
1905-1976

Wilburn Parker Clifton, M.D., died on April 12 after a lengthy illness. A 1933 graduate of the University of Louisville School of Medicine, Doctor Clifton practiced general medicine in Barbourville for 40 years. He was an emeritus member of the Knox County Medical Society and the Kentucky Medical Association.

WILLIAM N. OFFUTT III, M.D.
Lexington
1909-1976

William Nelson Offutt, III, M.D., died on July 8 at the age of 68. An ophthalmologist, Doctor Offutt was a 1933 graduate of the University of Pennsylvania School of Medicine. He was a member of the Fayette County Medical Society and the Kentucky Medical Association.

CHARLES L. TUTTLE, M.D.
Murray
1915-1976

Charles L. Tuttle, M.D., 62, died on August 22. A 1941 graduate of the Boston University School of Medicine, Doctor Tuttle practiced obstetrics and gynecology. He belonged to the Calloway County Medical Society and the Kentucky Medical Association.

ROY H. MOORE III, M.D.
Louisville
1947-1976

Major Roy Henry Moore III, M.D., died on September 7, 1976, at Ft. Sam Houston in San Antonio, Texas. Doctor Moore was an Army physician and a 1972 graduate of the University of Louisville School of Medicine (see story on page 519). He belonged to the Jefferson County Medical Society, as well as the Kentucky and American medical associations.

WILLIAM BURR ATKINSON, M.D.
Campbellsville
1896-1976

William Burr Atkinson, M.D., died on September 8 at the age of 80. A 1921 graduate of Jefferson Medical College, Doctor Atkinson was a general practitioner. Extremely active in the affairs of the Kentucky Medical Association, Doctor Atkinson served as a Councilor (Trustee) from the Fourth KMA District from 1934 until 1947. In 1949 he was elected as KMA Vice-President. He was an emeritus member of the Taylor County Medical Society, as well as the Kentucky and American medical associations.

CLAUD MILLER BAYS, M.D.
Lexington
1920-1976

Claud Miller Bays, M.D., 56, died on September 9. A general practitioner, Doctor Bays graduated from Johns Hopkins University School of Medicine in 1945. He belonged to the Fayette County Medical Society and the Kentucky Medical Association.

BRIEF SUMMARY OF
PRESCRIBING INFORMATION
ANTIMINTH® (pyrantel pamoate)
ORAL SUSPENSION

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13μg/ml) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with preexisting liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg of pyrantel base/ml) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg/lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 ml of Antiminth per 10 lb. of body weight. (One teaspoonful=5 ml.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

How Supplied. Antiminth Oral Suspension is available as a pleasant tasting caramel-flavored suspension which contains the equivalent of 50 mg pyrantel base per ml, supplied in 60 ml bottles and Unitcups™ of 5 ml in packages of 12.

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A division of Pfizer Pharmaceuticals
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One swallow does it



eliminates Pinworms and Roundworms with a single dose

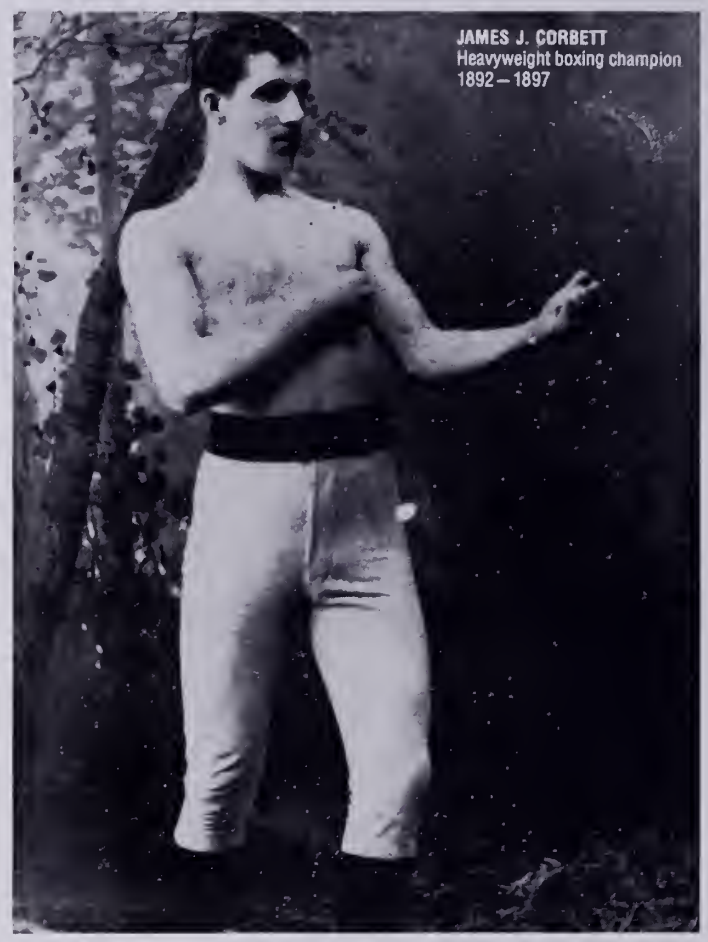
- **Single dose effectiveness against both pinworms and roundworms**—The only single-dose anthelmintic effective against pinworms *and* roundworms.
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- **Economical**—a single prescription will treat the whole family.
- **Highly acceptable**—pleasant-tasting caramel flavor.
- **Convenient**—just 1 tsp. for every 50 lbs. of body weight. May be taken without regard to meals or time of day.

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Please see prescribing information on facing page. NSN 6505-00-148-6967

Antiminth® ORAL SUSPENSION
(pyrantel pamoate) equivalent to 50mg pyrantel/ml

Famous Fighters



NEOSPORIN® Ointment
(polymyxin B-bacitracin-neomycin)
is a famous fighter, too.

Provides overlapping, broad-spectrum antibacterial action to help combat infection caused by common susceptible pathogens (including staph and strep).

Each gram contains: Aerosporin® brand Polymyxin B Sulfate 5,000 units; zinc bacitracin 400 units; neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin base); special white petrolatum qs in tubes of 1 oz and 1/2 oz and 1/32 oz (approx.) foil packets.

INDICATIONS: Therapeutically (as an adjunct to systemic therapy when indicated) for topical infections, primary or secondary, due to susceptible organisms, as in: • infected burns, skin grafts, surgical incisions, otitis externa • primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia) • secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis) • traumatic lesions, inflamed or suppurating as a result of bacterial infection.

Prophylactically, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing. **CONTRAINDICATIONS:** Not for use in the eyes or external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of the components. **WARNING:** Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended. **PRECAUTIONS:** As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs. **ADVERSE REACTIONS:** Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.



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Burroughs Wellcome Co.
Research Triangle Park
North Carolina 27709

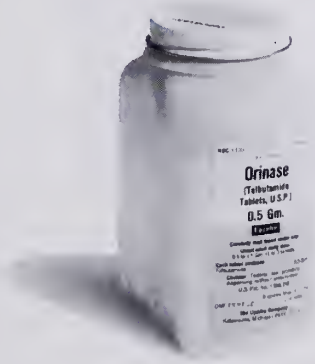
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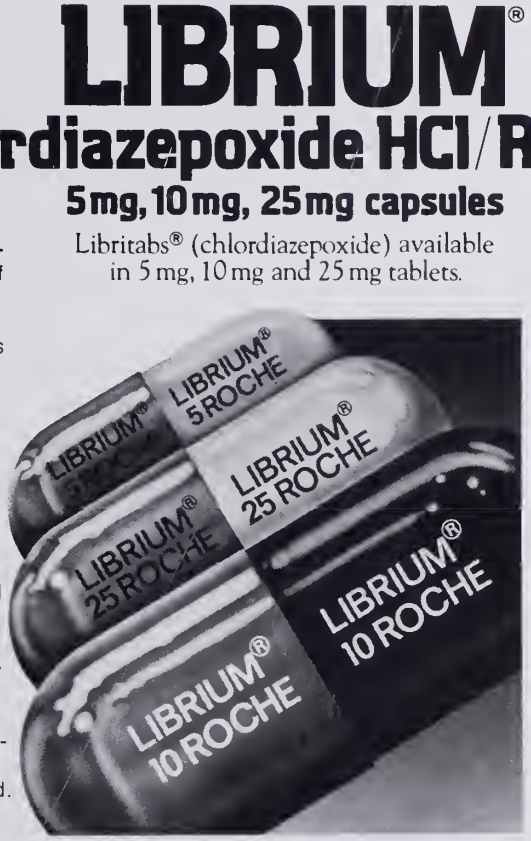
- a predictable pattern of patient response
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- three dosage strengths meet most patient needs

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chlordiazepoxide HCl/Roche

5mg, 10mg, 25mg capsules

Libritabs® (chlordiazepoxide) available in 5 mg, 10 mg and 25 mg tablets.



fore prescribing, please consult com- te product information, a summary of ich follows:

lications: Relief of anxiety and tension curring alone or accompanying various ease states.

ntraindications: Patients with known ersensitivity to the drug.

rnings: Caution patients about pos- e combined effects with alcohol and er CNS depressants. As with all CNS- ng drugs, caution patients against ardous occupations requiring com- e mental alertness (*e.g.*, operating chinery, driving). Though physical and chological dependence have rarely n reported on recommended doses, caution in administering to addiction- e individuals or those who might in- se dosage; withdrawal symptoms luding convulsions), following discon- ation of the drug and similar to those n with barbiturates, have been reported.

***sage in Pregnancy:* Use of minor anquilizers during first trimester hould almost always be avoided ecause of increased risk of con- enital malformations as suggested several studies. Consider possi- ility of pregnancy when instituting erapy; advise patients to discuss erapy if they intend to or do ecome pregnant.**

cautions: In the elderly and debilitated, in children over six, limit to smallest ctive dosage (initially 10 mg or less per to preclude ataxia or oversedation, easing gradually as needed and toler- . Not recommended in children under Though generally not recommended, if bination therapy with other psycho- tropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (*e.g.*, excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Usual Daily Dosage: Individualize for maximum beneficial effects. *Oral—Adults:* Mild and moderate anxiety and tension, 5 or 10 mg *t.i.d.* or *q.i.d.;* severe states, 20 or 25 mg *t.i.d.* or *q.i.d. Geriatric patients:* 5 mg *b.i.d.* to *q.i.d.* (See Precautions.)

Supplied: Librium® (chlordiazepoxide HCl) *Capsules,* 5 mg, 10 mg and 25 mg—bottles of 100 and 500; Tel-E-Dose® packages of 100, available in trays of 4 reverse-numbered boxes of 25, and in boxes containing 10 strips of 10; Prescription Paks of 50, available singly and in trays of 10. Libritabs® (chlordiazepoxide) *Tablets,* 5 mg, 10 mg and 25 mg—bottles of 100 and 500. With respect to clinical activity, capsules and tablets are indistinguishable.

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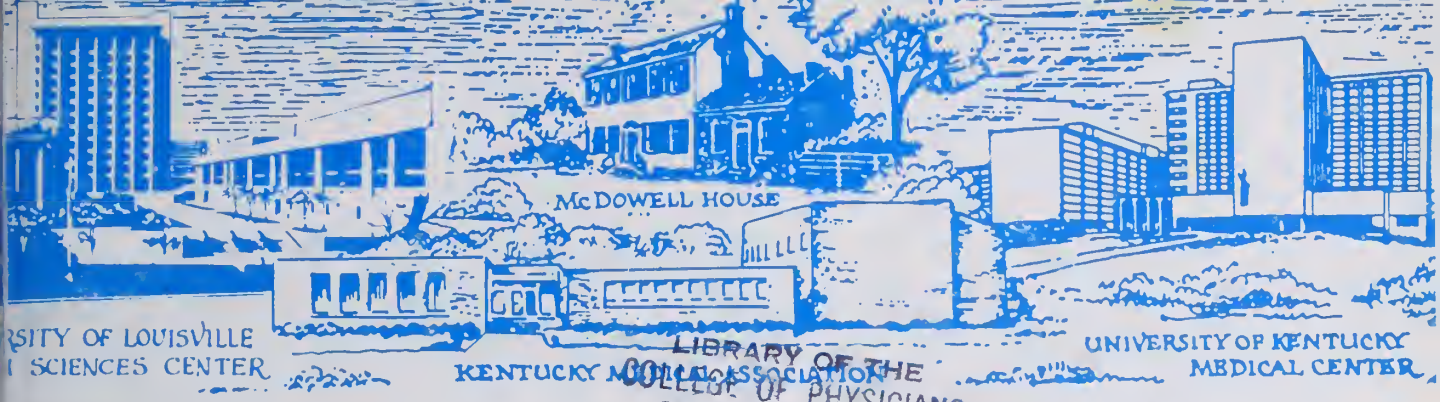
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Please see preceding page for a summary of product information.



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The Journal of The KENTUCKY Medical Association

Swine Influenza: History and Recommendations for Vaccination
Martin Raff, M.D., Julio Melo, M.D., and Patricia Barnwell, B.S. 543

Hallucinations Following Withdrawal of Valium
John Floyd, Jr., M.D., and C. Michael Murphy, M.D. 549

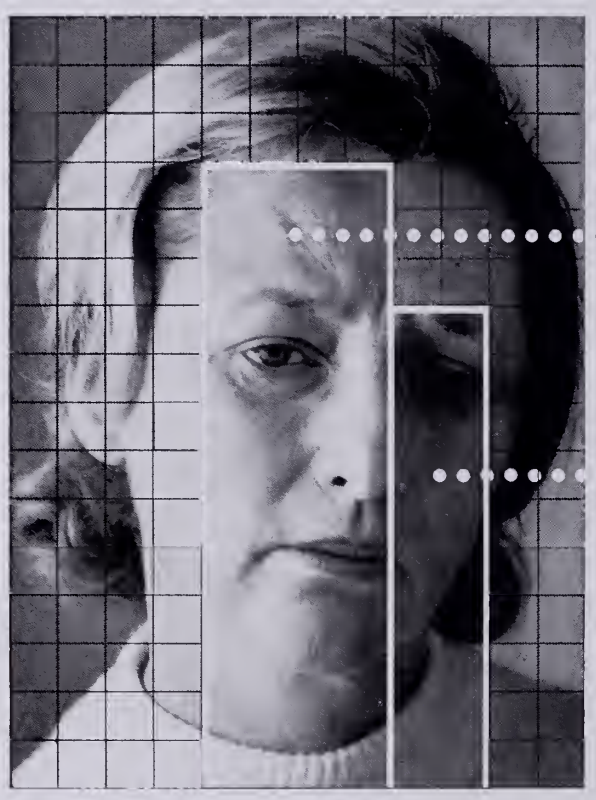
Psoriasis
Ullin Leavell, M.D., Ira Mersack, M.D., and William McDaniel, M.D. 551

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Both often



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology, spasticity caused by upper motor neuron disorders, athetosis, stiff-man syndrome, convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequer and/or severity of grand mal seizures m require increased dosage of standard ar convulsant medication; abrupt withdraw may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ir gestion of alcohol and other CNS depres sants. Withdrawal symptoms (similar to those with barbiturates and alcohol) hav occurred following abrupt discontinuan (convulsions, tremor, abdominal and m cle cramps, vomiting and sweating). Ke addiction-prone individuals under caref

respond to one

According to her major ymptoms, she is a psychoneu- otic patient with severe nxiety. But according to the escription she gives of her eelings, part of the problem ıay sound like depression. 'his is because her problem, lthough primarily one of ex- essive anxiety, is often accom- anied by depressive symptom- tology. Valium (diazepam) ın provide relief for both—as ıe excessive anxiety is re- eved, the depressive symp- ms associated with it are also ften relieved.

There are other advan- ıges in using Valium for the ıanagement of psychoneu- otic anxiety with secondary epressive symptoms: the sychotherapeutic effect of alium is pronounced and ıpid. This means that im- rovement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.



Valium® (diazepam) IV

2-mg, 5-mg, 10-mg scored tablets

in psychoneurotic anxiety states with associated depressive symptoms

ırveillance because of their predisposi- ın to habituation and dependence. In egnancy, lactation or women of child- earing age, weigh potential benefit gainst possible hazard.

ecautions: If combined with other psy- ıotropics or anticonvulsants, consider ırefully pharmacology of agents em- oyed; drugs such as phenothiazines, ırcotics, barbiturates, MAO inhibitors ıd other antidepressants may potentiate action. Usual precautions indicated in ıtients severely depressed, or with latent epression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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Volume 76 • November 1976

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MESSAGE FROM THE PRESIDENT



With the annual session of KMA just concluded and, while it is fresh in all of our minds, I want to review how policy is established for our Association. I often hear criticism about what the Board does, or what "they" did at the House of Delegates and I want to emphasize that policy is set by the delegates. The Board and Officers simply try to carry out the wishes of the House.

Delegates are elected by the individual component societies, proportionate to the number of members in that society—with the exception that any society, even if composed of only one member, is entitled to one delegate. These delegates, if carefully selected, represent the views of the society that elects them. These delegates receive reports of all active KMA committees, officers, the report of the Board of Trustees, and resolutions introduced by component societies or by any member of the Association. These reports represent the items of business that will be discussed at the meeting. The reports are assigned to reference committees on the afternoon of the first session of the House where the pro's and con's are discussed at length. The reference committee then brings to the last session of the House a recommendation based on what it feels the consensus of the discussion was at the reference committee meeting. All delegates then have an opportunity to fully discuss each recommendation before a final vote is taken. The result of the vote establishes the policy of the KMA. It then becomes the task of the Board of Trustees to implement these policies—**but the delegates set the policy.**

The problems that I see with this method is that all of us wait until the last minute to submit our reports and our resolutions to have some of them not included in the delegates' information booklet and hence they do not get discussed by the component societies prior to the meeting of the House.

To make it easier on us all next year let's resolve to submit our resolutions and reports earlier in the year (at least by June 30th) and perhaps they can be gotten into the hands of the delegates earlier so that all members may have input into the next session of the House prior to the last night of the meeting.

Paul J. Parks

POSTGRADUATE OPPORTUNITIES

IN KENTUCKY

NOVEMBER

13-14 Fall Seminar, Kentucky Academy of Family Physicians, Cumberland Falls

17 First Annual Marion F. Beard Symposium (Hematology Related), Louisville Regional Red Cross Blood Center, Louisville

17 "Urinary Tract Infections,"** Louisville Area CME Consortium, Health Sciences Center, Louisville

17 "Endoscopy,"** Louisville Area CME Consortium, Health Sciences Center, Louisville

30 "Public Health in Kentucky," by Mary Fox, M.D., sponsored by Letcher County Medical Society, Elkhorn Country Club, Jenkins. Prior registration required.

DECEMBER

1 "Symposium on Pain,"** Health Sciences Center, Louisville

2-3 "Genetic Counseling for the Practicing Physician,"** University of Louisville Health Sciences Center, Louisville

6 "Diagnosis and Office Management of Hypertension,"** Marriott Inn, Clarksville (Louisville Area)

15 "Central Nervous System Infections,"** Health Sciences Center, Louisville

17-18 "Gastrointestinal Workshop for the Practicing Physician,"* University of Kentucky Medical Center, Lexington

JANUARY

5 "Evaluation of the Multiple Injury Patient,"** Health Sciences Center, Louisville

19 "Health Care for Adolescents,"** Health Sciences Center, Louisville

26 "Suicide,"** Louisville Area CME Consortium, Health Sciences Center, Louisville

---

**For further information, contact: Frank R. Lemon, M.D., Associate Dean for Continuing Education, University of Kentucky College of Medicine, Lexington 40506*

***For further information contact: Gerald D. Swim, Executive Director, Office of Continuing Education, University of Louisville School of Medicine, Louisville 40202*

IN SURROUNDING STATES

DECEMBER

1-2 "Treatment and Management of Chronic Obstructive Lung Disease," Holiday Inn Airport, Indianapolis

2 "Clinical Syndromes of Auto-Immunity," Reid Memorial Hospital, Richmond, Ind.

4-8 AMA Clinical Convention, Sheraton Hotel, Philadelphia

STATEMENT OF OWNERSHIP MANAGEMENT AND CIRCULATION

(Act of August 12, 1970; Section 3685. Title 39, United States Code)

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1. Sales through dealers and carriers, street vendors and counter sales:	0	0
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C. Total paid circulation:	3327	3350
D. Free distribution by mail, carrier or other means:		
1. Samples, complimentary, and other free copies:	226	237
E. Total distribution	3553	3587
F. Office use, left-over, unaccounted, spoiled after printing:	41	38
G. Total:	3594	3625

I certify that the statements made by me above are correct and complete. Robert G. Cox, Managing Editor.

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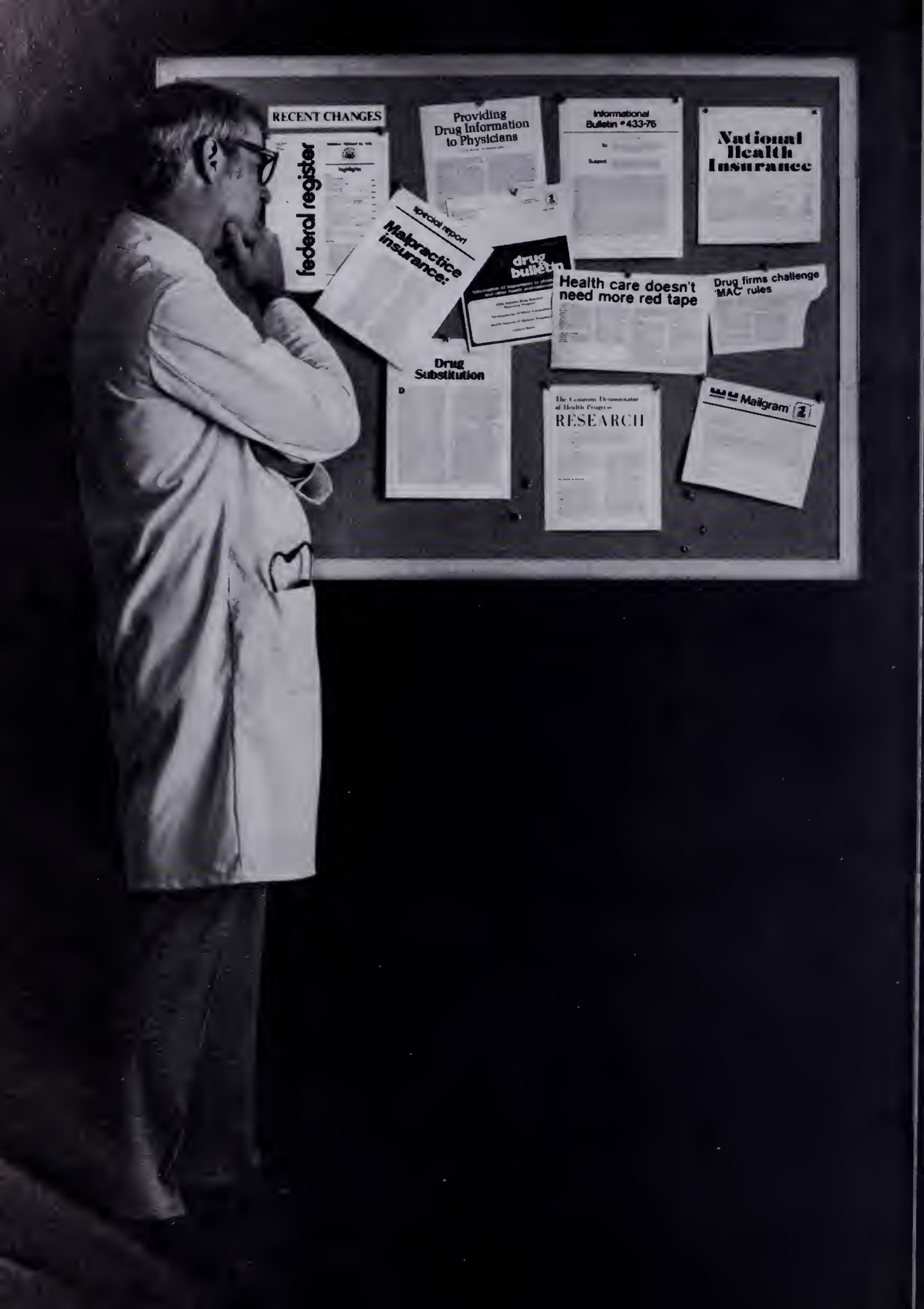
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THERE ARE A LOT OF PEOPLE GETTING BETWEEN YOU AND YOUR PATIENT.

Medicine today is in the spotlight, subjected to all nds of scrutiny. Your control over patient therapy is ing monitored, judged and occasionally abrogated, metimes by unknown third parties.

The worry is that in the wake of this focus, the rela- nship between you and your patient will be weakened, thout offsetting benefits. Consider three examples:

Drug substitution In most states, pharmacy laws, ulations or professional custom stipulate that your n-generic prescriptions be filled with the precise prod- s you prescribe. But in the last five years, a dozen or re State laws have been changed, permitting the phar- cist in most cases to select a product of the same neric drug to fill any prescription.

Ironically, this dilution of physician control has en place against a background of growing evidence t purportedly equivalent drug products may be in- ivalent, since neither present drug standards nor their orcement are optimal. In fact, the FDA itself says it not enforced the same standards for hundreds of llow-on" products that it had applied to the original DA approvals. Thus physician control over patient rapy is being eroded with a risk that patients may be osed to drugs of uncertain quality.

The major advertised claim for substitution is reduced scription prices for consumers. Yet no documentation ny significant savings has been produced.

MAC Maximum Allowable Cost, MAC for short, is ederal regulation designed to cut the Government's g bill by setting price ceilings for drugs dispensed to dicare and Medicaid patients. Unless the prescriber ifies on the prescription that a particular product is lically necessary, the Government intends to pay only he cost of the lowest-priced, purportedly-equivalent, generally-available product. The effect of the program may be that elderly and indigent patients will be restricted to products which someone in Washington believes are priced right. Practicing doctors will have little to say about administration of the program, since Government will have absolute authority to make its choices stick.

The drug lag The future of drug and device research depends upon a scientific and regulatory environment that encourages therapeutic innovations. The American pharmaceutical industry annually is spending more than $1 billion of its own funds and evaluating more than 1,200 investigational compounds in clinical research. Disease targets include cancer, atherosclerosis, viruses and central nervous system disorders, among others. But there is a major barrier to the flow of new drugs to your patients: The cost of the research is more than ten times what it was, per product, in 1962; and whereas governmental clearance of new drug applications took six months then, it commonly consumes two years now.

The FDA needs adequate time, of course, to consider data. But it is equally clear that the present approval process contributes to needless delay of needed therapy. That's why the increased efficiency of the drug approval process is vital to all our futures.

If these issues concern you, we suggest that you make your voice heard—among your colleagues and your representatives in State legislatures and in Washington.

It could make a difference in your practice tomorrow.

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VOLUME 74 NOVEMBER 1976 NUMBER 11

Swine Influenza: History and Recommendations for Vaccination†

MARTIN J. RAFF, M.D.,* JULIO C. MELO, M.D., AND PATRICIA A. BARNWELL, B.S.
Louisville, Kentucky

INFLUENZA is an acute infectious disease of the respiratory tract caused by the influenza virus. It may occur in localized outbreaks, epidemics, or pandemics (worldwide outbreaks). The term influenza may have come from the Latin word "influere," meaning "to invade," or from the Italian term "influenza di freddo," meaning "effect of cold" or "winter factor."

The modern history of the disease began with the pandemic of 1889 to 1895, which probably originated in China. Morbidity and mortality were high. In Massachusetts, for example, 340,000 of of a population of 850,000 became ill and there were many deaths. In 1890 Pfeiffer isolated *Hemophilus influenzae* from patients with influenza, believing this bacterium to be the etiologic agent of the disease.[11]

The most severe influenza pandemic occurred in 1918-1919, and although *H. influenzae* played a role as a secondary invader, many workers claimed that the disease was due to a filterable virus. In spite of the large amount of work done in 1918-1919, the viral etiology of influenza was not established unequivocally at that time.

The first demonstration of an influenza virus was achieved in 1901, when Centanni and Savunozzi established that fowl plague was a viral disease.[1] However, it was not until 1955 that Schaffer[12] showed the fowl plague virus to be antigenically related to the human influenza A virus. Swine influenza first appeared during the 1918 pandemic. It was initially recognized by Koen in Iowa,[7] and he felt that the disease was actually transmitted from man to swine. Unfortunately, the virus was not isolated during this time period. In 1931, Shope[18] found that swine influenza could be transmitted by filtrates of infected material, producing a mild form of the disease. Many workers demonstrated the presence of neutralizing antibodies to the swine virus in normal human sera,[4,9] and Hoyle and Fairbrother[6] showed that the human and swine viruses possessed a common S antigen (see below). The swine virus is therefore a strain of influenza virus A. Studies of human antibodies to the swine virus have indicated that this agent may have been responsible for the 1918 pandemic of human influenza.

In England, the increase in mortality from influenza began in 1891.[10] The United States also experienced a high mortality in the pandemics of 1889-1895 and 1918-1919, and probably also in epidemics in later years. However, after 1920 the mortality rate from influenza decreased steadily, despite increasing urbanization, population growth, and more widespread travel.[2] Since 1889, the United States has experienced 52 epidemics of influenza severe enough to be associated with an excess of mortality. In addition, smaller outbreaks and interepidemic disease have occurred.

The Virus

Serological classification of the major groups of influenza viruses is based upon the presence

†*Paper was presented in part at the KMA Annual Meeting, September 29, 1976.*

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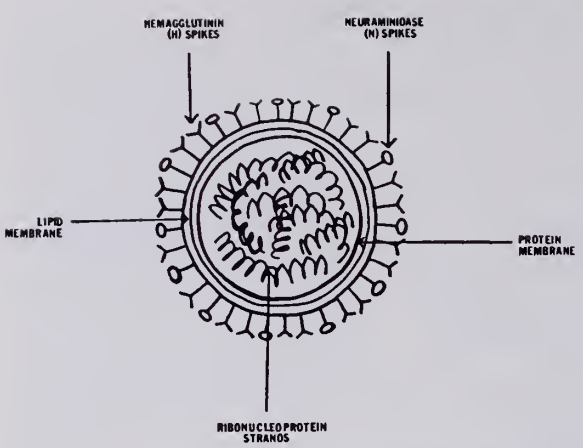


FIG. 1. Schematic representation of the Influenza A virus.

of an S antigen, which is the protein component of the viral ribonucleoprotein (Figure 1). Anti-S antibodies can be detected by complement fixation and serve to divide the influenza virus into three major groups, designated A, B, and C. The first human influenza virus to be identified, the type A virus, was isolated in 1933 by Smith, Andrewes, and Laidlaw.[15] In 1940, Francis[5] and Magill[8] independently established the second serotype, the type B influenza virus. In 1949, Taylor[16] reported the isolation of a third influenza virus, which was designated type C. These types do not cross-react serologically, and type A produces the most severe form of influenza in man. Type B produces milder disease, and type C is only rarely associated with serious illness in man.

The viral surface is coated with antigenic spikes composed of hemagglutinins (H) and neuraminidases (N), and these antigens enable serologic subtyping of influenza A viruses, which are usually responsible for epidemic disease in man. The viral subtypes are numbered according to these antigens and are therefore listed as H1N1, H2N2, etc.

Epidemics

The major epidemics occurring since the 1880's are depicted in Table 1. A viral subtype undergoes antigenic drift over approximately a 10-year period following initial outbreaks of disease due to the initial subtype isolated. Antigenic drift involves minor variations in the identity of the virus, as typified by the drift from Hong Kong to Victoria. Approximately each decade the influenza A virus undergoes an antigenic shift, which is a major alteration in its antigenic makeup. Antigenic shift is usually associated with new pandemic outbreaks of disease, since immunity to the new viral subtype is absent in the population at large.

Although the virus responsible for the 1918-1919 epidemic was never isolated, serological studies have suggested that the swine influenza virus was the etiologic agent of this outbreak. Many persons who either were well or had survived an episode of influenza from 1918-1919 had neutralizing antibodies for the swine influenza virus.[4,9] Since 1918-1919, there have been only minor outbreaks of disease due to the swine influenza virus, and these have almost invariably occurred in individuals exposed to infected animals or animal products. There has been little or no evidence of human-to-human transmission until recently (see below).

The influenza pandemic of 1918 occurred in three waves. The first appeared in the winter and spring of 1917-1918. All areas of the world were involved, with the exceptions of the islands of St. Helena and Mauritius. It is estimated that 50% of the world population was infected, but the mortality rate was low during the first wave. The second wave started at Fort Devens in Ayer, Massachusetts, on September 12, 1918 and eventually involved the whole world with the exception of Australia. Although person-to-person spread occurred, outbreaks of the disease appeared simultaneously in widely separated areas, but then would take two days to two weeks to spread relatively short distances. None of the people infected in the first wave became ill during the second wave. It has been estimated that about 500 million people were involved during a period of about 6-8 weeks and that there was a total of about 20 million deaths. At the height of the outbreak, the number of daily fatalities in Boston was 175; in New York City, 600-700; and in Philadelphia, 1,700. Influenza complicated by pneumonia was responsible for the deaths of 2% of the population per month at the peak of the epidemic. A third wave of influenza in the spring of 1919 was characterized by very low morbidity and mortality rates.

In the first months of 1976, about 500 cases of influenza due to the swine influenza virus were identified, either clinically or serologically, in an outbreak at Fort Dix, New Jersey.[3] There was

only one death and only 11 patients were clinically ill. Of great significance is the fact that direct human-to-human transmission appears to have been the major route of infection. Almost simultaneously, two new cases of influenza due to the swine virus occurred in the civilian population.[17]

A total of 15 cases of infection with the swine influenza virus and one outbreak with probable human-to-human transmission have been documented recently in the United States.[3,14,17] This lends support to the concept that the swine influenza virus is dispersed widely in the United States.[17]

All prior pandemics have occurred at about 10-year intervals, and each has been antedated by a minor focus of infection with the new serological strain several weeks to months prior to major outbreaks. The limited outbreaks of swine influenza in New Jersey and elsewhere may portend a major epidemic with a new influenza virus subtype; if so, this would be the first time that we have been given the opportunity to immunize the population against a potentially epidemic strain of virus prior to a major outbreak.

Those who question the need for immunization against the swine influenza virus appear to have some valid arguments, as follows. First, no one can predict that a swine influenza epidemic would be as severe as the 1918 outbreak. Secondly, one of the most important causes of death in 1918 was secondary bacterial pneumonia, and fatality rates from secondary bacterial infection would be lower now. Third, the virus isolated from the Fort Dix outbreak does not seem to have been a particularly virulent strain. Fourth, there is little evidence that an affinity for pulmonary tissue will develop as strains of virus pass through the human host. There was no enhancement of virulence in the Asian strain during its several waves of infection through the world, and the limited outbreak at Fort Dix subsided spontaneously, with most cases being mild or asymptomatic. Fifth, despite the fact that there were 12,000 persons at Fort Dix, only about 500 became infected. This outbreak may have been an isolated zoonosis which may not recur. Finally, the swine influenza viral vaccine has the potential to produce significant morbidity in those receiving it because of attendant side effects.

Much of the experience of 1918 tends to question or negate some of the above arguments. First of all, the next outbreak could be of equal or greater severity than the 1918 epidemics. Second, although some deaths were due to superimposed bacterial pneumonia, many patients who died, first sickened in the morning of one day and were dead before the dawn of the next. In a large number of cases, death may have been due to viral pneumonia alone. In addition, some deaths were due to viral myocarditis and encephalitis. At the present time, over 90% of the population at large is susceptible to the swine influenza virus, as shown by the absence of antibodies. On three prior occasions, the recovery from humans of an influenza A virus with a new hemagglutinin (H) or neuraminidase (N) antigen unrelated to strains prevalent in the population has been followed by widespread outbreaks (Table 1). There is a reservoir of swine influenza virus present in the large swine population in the midwestern United States. Many persons handling these animals have antibodies to this virus, and there may have been prior minor episodes of unrecognized infection. Waiting for outbreaks to occur before immunizing is a questionable procedure, and the pandemic may very well begin in the United States. Furthermore, the epidemiology of influenza clearly indicates that it will probably appear in widely separated areas of the world simultaneously. Even if the disease appears first in other parts of the globe, there may not be sufficient time to immunize a large enough percentage of the population. In addition, there is a two-week interval between administration of the vaccine and development of adequate protective antibody levels. Lastly, it is unlikely that there will be significant morbidity associated with the killed vaccines currently in use in the United States (see below).

Table 1

CAUSES OF MAJOR INFLUENZA EPIDEMICS

Years	Virus Types	Name of Virus
1889-1899	Unknown	(Evidence suggests similar to 1957 Asian)
1900-1917	Unknown	(Evidence suggests similar to 1968 Hong Kong)
1918-1928	$H_{SW}1N1$ (presumed)	Swine
1929-1945	H_0N1	Puerto Rico — 8
1946-1956	H1N1	Fort Monmouth — 1
1957-1967	H2N2	Asian
1968-present	H3N2	Hong Kong — Victoria
1976-?	$H_{SW}1N1$	New Jersey Swine

The Vaccines

All of the influenza vaccines currently recommended contain killed viruses, which have been

Table 2

RECOMMENDATIONS FOR USE OF INFLUENZA VACCINES 1976

Age of Person	Vaccines		
	Monovalent A/New Jersey/76	Bivalent A (New Jersey/76 + Victoria/75)	Monovalent B/Hong Kong
Under 3	No recommendation	No recommendation	No recommendation
3-17 not at "high risk"	"	"	"
3-17 "high risk"	No	YES — split virus vaccine in 2 doses, 4 weeks apart	Yes — 1 dose 24-48 hrs.* after Bivalent A
18-24 not at "high risk"	Yes — whole virus vaccine, one dose	No	No
25-55 not at "high risk"	Yes — whole virus or split virus vaccine, one dose	No	No
18-24 "high risk"	No	YES — split virus vaccine in 1 dose	YES — 1 dose 24-48 hrs.* after Bivalent A
25-55 "high risk"	No	YES — whole virus or split virus vaccine in 1 dose	YES — 1 dose 24-48 hrs.* after Bivalent A
55 and over	No	YES — whole virus or split virus vaccine in 1 dose	YES — 1 dose 24-48 hrs.* after Bivalent A

*May be given simultaneously with either Monovalent A or Bivalent A vaccines but may accentuate side effects.

produced in embryonated chicken eggs and purified. There are two types of killed virus vaccines: 1) a whole virus vaccine and 2) a split-virus (chemically disrupted) vaccine. Either vaccine employed should be administered intramuscularly for optimal antibody response. These vaccines should **not** be given subcutaneously or intradermally.

There are several vaccine preparations available, each containing different serotypes of virus. These are as follows:

1. A monovalent vaccine containing the A/New Jersey/76 $H_{sw}1N1$ (swine) virus.

2. A bivalent vaccine containing the swine virus plus A/Victoria/75 (H3N2), an organism which is an antigenic drift variant of the Hong Kong influenza A virus and which is currently responsible for intermittent cases of illness around the world.

3. A monovalent vaccine containing the B/Hong Kong influenza virus.

The quantity of virus contained in each vaccine, whether whole or split-virus, is expressed as numbers of chick cell agglutinating (CCA) units. A single dose of the vaccines described above contains 200 CCA units of each virus, except for the B/Hong Kong vaccine, which contains 500 CCA units.

Vaccination

1. All persons between the ages of 18 and 54 who are not classified as "high risk" should receive one dose of the monovalent A/New Jersey/76 (swine influenza) vaccine.
   a. Those between the ages of 18 and 24 should receive the whole virus vaccine.
   b. Those who are 25 or older may receive either the whole virus or split-virus vaccine.

2. All children between the ages of 3 and 17 years who are classified as "high risk" should receive the bivalent A vaccine (swine + Victoria) in two doses each given 4 weeks apart. They should receive **only** the split-virus vaccine. They should not be given the influenza vaccine at the same time they receive DPT vaccine, or within two weeks of receiving a dose of measles vaccine. They should also be given a single dose of the monovalent B/Hong Kong influenza vaccine. This should be administered 24-48 hours after the first bivalent A dose in order to minimize side effects.

3. All persons aged 18 to 54 years who are classified as "high risk" should receive a single dose of the bivalent A vaccine (swine + Victoria).
   a. Those aged 18 to 24 should receive the whole virus vaccine.
   b. Those 25 and older can be given either the whole virus or split-virus vaccine.

These individuals should also receive a single dose of the monovalent B/Hong Kong vaccine, given 24-48 hours following the dose of bivalent

A vaccine to minimize side effects.

4. **All** persons 55 years old and over should be considered as "high risk" individuals. They should receive a single dose of the bivalent A vaccine (swine + Victoria) and a single dose of the monovalent B/Hong Kong vaccine, given 24-48 hours apart to minimize side effects.

5. No recommendations for immunization of children aged 3 to 17 not at "high risk" or for any children less than 3 years of age, whether or not classified as "high risk," have been made.

"High Risk"

Persons considered to be at "high risk" of sustaining an increased incidence of morbidity and mortality are those who are/have:

1. 65 years of age and over.
2. Heart disease of any etiology.
3. Bronchopulmonary diseases (asthma, cystic fibrosis, etc.)
4. Chronic renal disease.
5. Chronic neuromuscular disorders.
6. Diabetes and other chronic metabolic diseases.
7. Malignancy and other immunosuppressed states.

Side Effects

Mild local reactions may occur at the site of injection. This is not an allergic response and requires no therapy. The incidence of other side effects in age groups 25 years and over is about 2%, and is slightly higher in younger persons. Minor side effects consist of fever, myalgias, and malaise, occurring 6-12 hours after vaccination and seldom persisting longer than 24-48 hours. A **rare** individual may manifest an immediate allergic response with wheal and flare at the injection site or various respiratory expressions of hypersensitivity.

Neurological disorders such as myeloencephalopathy have been temporally but not causally associated with the use of influenza vaccines in 12 patients since 1950. Three of these patients expired; however, it is doubtful that their illnesses were due to the influenza vaccine, since their case histories were compatible with other causes. The remaining nine patients recovered fully.

Individuals who should **not** receive the vaccines include those who:

1. Are allergic to eggs.
2. Have a questionable history of allergy to eggs. If the person has been able to tolerate soft boiled or loose fried eggs, he is probably not allergic. Skin testing by a superficial scratch test using the vaccine may help to resolve the issue.
3. Persons with an acute febrile illness should have vaccination delayed until resolution of the illness.
4. Persons who have had allergic reactions following previous influenza vaccination should not be vaccinated.

Pregnancy

Pregnant women should be vaccinated along with the remainder of the population. There is no inherent risk to the fetus from the vaccine, but there is significant fetal wastage associated with influenza occurring during pregnancy.

Liability

Under Public Law 94-380, all participants in the immunization program are covered for claims made against them as if the claims were made against the Federal Government. If the participant was negligent, he can be sued by the United States Government.

A physician is considered a "participant" when performing any duty associated with administration of swine influenza vaccine through a public health facility. In order to obtain protection from liability, the physician must meet the following conditions:

1. He cannot charge a fee for the vaccine or for its administration.
2. He must adhere to the guidelines for immunization set forth by the Center for Disease Control, the United States Public Health Services, and related departments.
3. He must be certain that all persons to be immunized have signed an informed consent form.
4. All persons immunized must be provided with a written statement detailing the risks and benefits of the vaccine and their rights and alternatives relating to the immunization program.

Summary

A rare opportunity to prevent the outbreak of an influenza epidemic due to a new serologic strain (Swine-A/New Jersey/76 $H_{sw}1N1$) has prompted detailed recommendations for immunization of large segments of the population with a killed vaccine.

Although the chances of such an epidemic actually occurring appear to be small, the potential for significant morbidity and mortality should it occur is great. Reduction of this potential morbidity and mortality through widespread vaccination is the goal of this program. A summary of information concerning the rationale for the development of this program has been presented along with details concerning the vaccines available and who should or should not be vaccinated. No recommendations have been made for children less than 3 years of age or for children ages 3 to 17 not at "high risk."

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Manuscript Memos

Manuscripts should be submitted in duplicate to The Journal of KMA, an original copy and one carbon, and typed with double spacing. Maximum length of an article should not exceed 4500 words; the Board of Consultants on Scientific Articles prefers that they be briefer than this when possible.

In submitting a manuscript, the author is requested to include a concise summary, not to exceed 35 words, to be used as a sub-title when the article is published in The Journal. The purpose of the summary is to create additional interest and encourage greater readership.

Footnotes and bibliographies should conform to the style of the Quarterly Cumulative Index Medicus published by the American Medical Association. This requires in the order given name of author, title of article, name of periodical, with volume, page, month—day of month if weekly—and year. The Journal of the KMA does not assume responsibility for the accuracy of references used with scientific articles.

All scientific material appearing in The Journal is reviewed by the Board of Consultants on Scientific Articles. The editors may use up to six illustrations with the essayist bearing the cost of all over three one-column halftones.

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Hallucinations Following Withdrawal of Valium†

John B. Floyd, Jr., M.D., and C. Michael Murphy, M.D.
Lexington, Kentucky

Five patients were seen in 1973-1976 with hallucinations presumed to be from Valium withdrawal.[1-3]

VALIUM was introduced in 1963 and is one of a class of compounds which shows marked anti-anxiety effects in human subjects. In 1966, it was observed[4] that repeated daily doses of diazepam produced gradually rising blood levels in humans. These compounds accumulated in fat and brain tissues in greater concentration than in the blood.

Case Reports

Patient #1, (F.C.) was a 47-year-old white female with a hiatus hernia, peptic ulcer disease, and biliary dyskinesia. On August 15, 1973, a bilateral vagotomy, a pyloroplasty, a common duct exploration, and a transduodenal section of the sphincter of Oddi were performed. On her sixth postoperative day she became quite confused as to time and place, and had visual hallucinations. This was controlled in 48 hours with addition of Valium and she gradually was withdrawn from Valium in her convalescent period at home. In the past two years she's had three psychiatric admissions to the hospital for depression. Prior to surgery, she had been taking 10 mgm of Valium four times a day for five months until March 1973, and then 5 mgm of Valium two or three times daily prior to her hospital admission.

Patient #2, (J.L.) was a 62-year-old white male who was admitted on August 27, 1973, with a bleeding gastrojejunal marginal ulcer, which was sutured after he had received seven pints of blood. Seventy-two hours following surgery he became quite stubborn and confused, and had hallucinations, responding to treatment with Librium, 25 mgm every four to six hours. He had been on 5 mgm of Valium four times a day for years.

Patient #3, (P.P.) was a 50-year-old white male who was admitted on December 9, 1973, four days after an automobile accident in which he received fractures of the right 6th to 11th rib, and the left 6th rib. A paralytic ileus was present and pain was relieved with an intercostal nerve block with Carbocaine and Rectocaine. Seventy-two hours after admission he had a personality change characterized by confusion, forgetfulness, and irrational behavior. He walked aimlessly about the hall, wanting to go home for his Valium. He had to be transferred to the neuropsychiatric floor for supervision. He responded to Librium, 100 mgm, every two to three hours. For years he had taken 10 mgm of Valium three or four times a day. He would drink whiskey on a frequent basis.

Patient #4, (M.L.N.) was admitted to the hospital on March 27, 1974, with endometriosis. Surgery was performed on the next day. On her fifth postoperative day, she began to hallucinate and was extremely jittery and confused. She did not respond to Compazine. The administration of 5 mgm of Valium in decreasing doses over the following week caused a return of lucidity. Her interesting comment, on the follow-up visit a year later, was that while on Valium, she had stopped sewing at home and quit teaching Sunday School. Since then, she has resumed sewing at home, was making quilts, repairing the children's clothes and teaching a class in Sunday School, as she had done before the use of Valium. For two years, she had taken 10 mgm of Valium four times a day.

Patient #5, (B.C.G.) was a 64-year-old white male admitted on February 19, 1976. His dosage prior to admission was 10 mgm of Valium three times a day for a number of years. In four days, after being taken off of the Valium, he had an onset of anxiety, insomnia, numbness, dizziness, picking at things which were not there, inappropriate chattering, disorientation as to time and place, and confusion. Remedication with Valium, 10 mgm four times a day, cleared the confusion. His admission diagnosis was agitated depression with epigastric complaints from a duodenal ulcer.

†*Read before the Spring meeting, Kentucky Chapter, American College of Surgeons, in Lexington on March 26, 1976.*
Received at KMA: 4-6-76.

His physician reported two more relapses with hallucinations and confusion following attempts to wean him away from his Valium.

Discussion

Five responses to the withdrawal of Valium in patients is reported. A study of the background of these patients revealed that all demonstrated previous chronic use of Valium.

The magnitude of this problem can be realized by the 1972 pharmaceutical report of 144,000,-000 prescriptions for sedatives, one-third of these being for Valium.[5]

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GRAND ROUNDS

University of Kentucky College of Medicine

This Journal feature will be presented alternately by the University of Louisville and the University of Kentucky Departments of Medicine and Departments of Surgery. We hope to have these features revolve around subjects of immediate practical interests to the practicing physician; and, for those of us not able to attend grand rounds in the teaching centers as often as we might, we hope this will represent a bit of a refresher course.

Psoriasis*

Case History

Chief Complaint: A 57-year-old white male was admitted to the University of Kentucky Medical Center on November 4, 1968, because of psoriasis of 17 years duration.

Present Illness: One month prior to admission he developed severe pain in the right knee. The knee was hot, swollen, and tender. His local physician gave him penicillin which did not relieve the pain. During the previous 17 years his psoriasis had become generalized in spite of treatment with topical medications. He denied ingestion of alcohol.

Physical Examination: The patient was a white male who weighed 300 lbs. His blood pressure was 140/90, pulse 80/minute, and temperature 98.6° F. Scattered erythematous papulo squamous lesions 1.0-3.0 cm in diameter were present over the torso. Erythematous scaling plaques 10-30 cm in diameter were present over the torso, arms, and legs. There were bleeding fissures over the elbows and knees. There was ectropion of the right lower eyelid. The right knee was swollen, hot, and tender. Laboratory findings revealed the following: Hemoglobin 14.0 gm per 100 ml, hematocrit 42%, white blood cell count 4,900/mm^3, mean corpuscular volume 90 μ^3; mean corpuscular hemoglobin content 30$\mu\mu$g and mean corpuscular hemoglobin concentration 33%. Differential count, polymorphonuclear 67%, stabs 11%, eosinophils 3%, lymphocytes 5% and monocytes 5%, glucose 88 mg%/ml; blood urea nitrogen 15 mg/100 ml, sodium 141 mEq/l, potassium 4.2 mEq/l, carbon dioxide 33 mEq/l, chloride 109 mEq/l, calcium 4.4 mEq/l, phosphorus 3.3 mg/100 ml, uric acid 8.5 mg/100 ml, L. E. cell preparation test negative, VDRL negative, Latex fixation rheumatoid arthritis negative, total protein 7.2 gm/100 ml, protein electrophoresis normal.

The urinalysis showed pH 7.0 specific gravity 1.019, protein negative, sugar negative, red blood cell 0 per high power field, white blood cell count 4 to 8 per high power field and casts 0 per high power field.

Hospital Course: Chest x-ray revealed some fibrosis, no specific inflammatory or neoplastic changes were noted. An x-ray of the right knee showed degenerative changes consistent with psoriatic arthritis. Plastic surgery was recommended for the ectropion.

He was initially treated with tar baths and ultraviolet irradiation. Later he was given cordran steroid ointments with occlusion. There was marked improvement with decrease in erythema and scaling of the skin. He was given indomethacin and colchicine for arthritis.

He responded to topical treatment initially; however, began to worsen in March of 1969. He was hospitalized and given 2.0 gms of hydroxyurea daily. Nine days later his white blood cell count had dropped to 3,100/mm^3 from 7,700/mm^3. His hydroxyurea was decreased to 1.0 gm/day and topical hydrocortisone and ultraviolet light were initiated. He was discharged to continue taking hydroxyurea 500 mg twice daily.

He did well for several months and his local physician checked his white blood cell count weekly.

On May 22, 1969, his white blood cell count dropped to 3,050/mm^3 from a discharge white blood cell count 5,300/mm^3. Hydroxyurea was stopped and he was hospitalized. His white blood cell count returned to 5,000/mm^3 in two weeks

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and he was again given hydroxyurea with good results.

He was followed in the Dermatology Clinic and did well on hydroxyurea. However, in November 1970 his psoriasis became worse. The hydroxyurea was discontinued and he was given methotrexate 2.5 mg every 12 hours three times weekly. While being followed in the Dermatology Clinic his dosage was reduced until he was completely off the methotrexate. However, he would flare and need to be started back on methotrexate at 2.5 mg every 12 hours three times weekly and then stabilized on 2.5 mg per week. His white blood cell count was 5,500/mm^3 to 6,200/mm^3 at this time and his SGOT and LDH were within normal limits.

The methotrexate was eventually stopped in 1971 and topical medications were used for the next four years. He used a variety of medications including tar baths, steroid creams, and tar ointments.

They gave him intermittent relief until September 1975 when he appeared to be refractory to conventional therapy and had a severe exacerbation.

A liver biopsy showed moderate fatty metamorphosis and one non-specific noncaseating granuloma. Methotrexate therapy was restarted after consultation with the Division of Gastroenterology.

From October 1975 to June 1976 he was treated with methotrexate 10 mg/week with good results.

However, whenever the dose was dropped to 5 mg/week he would flare. The methotrexate was eventually discontinued even though the liver function tests were within normal limits and the white blood cell count between 6,900/mm^3 to 5,700/mm^3.

Halciaonide (Halog cream) with occlusion was started but failed to give good results. By the end of June 1976 it was decided to start methotrexate therapy again. He was given 15 mg/week and on July 21, 1976, his dose was dropped to 7.5 mg/week and he was getting along well.[5-7]

Discussion

Psoriasis is a common skin disease presenting a sharp definable erythematous base with an adherent silvery white scale. It shows a wide variation in severity and distribution of its lesions with elbows, knees, scalp, and nails (pits) most often involved.

The disease was probably first described by Alsus in 35 AD as a variant of leprosy. Psoriasis has a worldwide distribution and a prevalence reported from one to six percent. The ratio of males affected to females is equal. The twenties is the most common age for the disease to first appear, but it has been diagnosed at birth and in the latter decades of life. Blacks of West African origin, American Indians, and Japanese have decreased incidence of the disease.

The genetic transmission of the disease is poorly understood but probably involved multiple subpopulations, several genetic loci, and the influence of environmental factors. Krain's[1] recent study of psoriasis and HL-A antigens found the HF-A antigen W-17 a useful genetic marker for the detection of a psoriatic subgroup characterized by a large number of affected relatives.

Many precipitating factors have been described, but in the majority of patients, precipitating factors are seldom identified. Trauma such as local injury vaccinations can give rise to a Koebner phenomenon. We already mentioned HL-A[13] and its association with psoriasis, especially the futtate form. Pregnancy and oral contraceptives have a variable effect on the disease. The majority of patients improve with warmer weather, but five percent arise in the summer. The worsening of psoriasis with emotional trauma is frequently seen.

The most obvious changes seen in the psoriatic skin are the epidermal thickening and the changes of the dermal capillaries. There is an increase in the number of germinative basal cells with an increased mitotic cycle. The epidermal turnover time is shortened from 28 to 3-4 days.[2] Tonofilament formation and keratohyline granules are reduced. Increased uric acid excretion is found in the urine. Multiple chemical abnormalities such as increased acid muccopolysaccharides, sulfhydryl groups, lipids, and phospholipids are noted. The dermal capillary loops are dilated and tortuous in both involved and uninvolved skin.[3] Gaps are seen between endothelial cells with resulting loss of cells, enzymes, and protein into the surrounding tissue. Voorhees[4] has shown cyclic-AMP (adenosine 3-5 monophosphate) to be reduced in psoriatic skin. Cyclic AMP appears to be a passable regulator of epidermal mitoses, cellular differentiation, and glycogen metabolism all of which are abnormal in psoriatic skin. This is a major area of investigation at the present time.

Pustular psoriasis exhibits the same changes as psoriasis vulgaris except for macroabscesses rather than microabscesses and a more rapid

epidermal turnover time. Marples[5] has evaluated the bacteriologic flora in psoriatic skin and has found an increase in *Staphylococcus aureus* especially after the skin is occluded with plastic film.

Psoriatic arthritis has been well described and affects approximately five percent of all patients. The arthritis varies from the severe mutilating type to mild distal interphalangeal involvement. In some the arthritic pattern is indistinguishable from that of rheumatoid arthritis.

In typical psoriatic plaques the histopathological picture is easily seen. The epidermis is acanthotic and the rete ridges are elongated. Dermal papillae are elongated and clubbed. The stratum corneum shows hyperkeratosis and acanthoses. Epidermal microabscesses are seen, with neutrophils the most common cell. The granular layer is thin.

Our patient had very severe psoriasis and many of the conventional methods of treatment were used. Daily applications of tar ointment, lotions, or baths followed by exposure to ultraviolet irradiation has been used for many years. Tar photosensitizes the skin and makes it more sensitive to ultraviolet irradiation. Many patients respond to this form of therapy. The disadvantage is that tar is messy, may stain clothing, and is unpleasant to smell.

Topical application of steroid lotions, creams, and ointments is also effective. However, preparations rub off on clothing and are rendered less effective. It has been estimated that application of the steroids followed by covering with occlusion (as saran wrap or plastic rain suits) makes the preparations 100 times as effective. One problem with this treatment is that occlusion may make patients perspire excessively. Also, atrophy of the dermis may occur if the preparations are used for long periods of time.

Treatment with methotrexate is very effective. It has been shown that methotrexate 2.5 mg every 12 hours three times weekly is not only effective but helps reduce the total amount of methotrexate that is given. Toxic reactions to methotrexate are related to the total amount of methotrexate the patient has received. The white blood cell count, liver function studies, and liver biopsy should be evaluated prior to the patient being given methotrexate. Methotrexate may potentiate hepatic fibrosis which may be found in some patients with psoriasis.

Hydroxyurea was shown to be effective in the treatment of psoriasis by Leavell and Yarbro[6] in 1969. The recommended dose is 0.5 gm three times daily.

To date 505 of 745 cases (68%) have been reported to be improved following treatment with hydroxyurea.[6-12] As a DNA inhibitor, the primary effect of hydroxyurea is on the hematopoietic system reducing the hemoglobin, red blood cells, white blood cells, and platelets. It may also produce macrocytosis.[8-10,12,13] A flu-like syndrome has been reported with use of the drug. The patient recovers from the flu-like syndrome in two to three days after the drug is discontinued. The hematological parameters usually return to normal within 10 days to two weeks. Usually patients experience improvement in three to four weeks after the drug is started.

It has been shown that psoralens and long-wave ultraviolet light (PUVA) are effective in clearing about 90% of patients with psoriasis. The combination is a DNA inhibitor and is effective in the treatment of psoriasis. Two oxsoralen tablets are taken every other day followed in two hours by exposure to UVA. The light is given in a special box with the exposure time carefully given by a physician or trained technician. In about three to four weeks there is usually clearing of the psoriasis. The complications and hazards of this new form of treatment are being evaluated at the present time.

Conclusion

Much progress is being made in understanding the pathogenesis and treatment of psoriasis. Although the course and cure are unknown there are many effective methods of controlling the disease at the present time.

Ullin W. Leavell, M.D.
Ira P. Mersack, M.D.
William McDaniel, M.D.

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(References continued on page 570)

EDITORIAL

"Oh! And I Need a New Prescription for My Valiants"

THE excellent contribution by Doctors John B. Floyd, Jr., and C. Michael Murphy in this issue illustrates simply and vividly the serious trouble that can befall patients who use diazepam or chlordiazepoxide over any period of time in excess of acute. The fact that the use of these drugs is common and practically universal should alarm again the large number of practicing physicians who are obliged every day to prescribe sedatives for anxious patients who feel they have a right to a pill to counteract each symptom. Doctors Floyd and Murphy point out that their interviews with "primary care" physicians indicate the common notion that these drugs are non-addicting which is gravely unfortunate since each package notes the habit forming propensity of these drugs to the patient.

Another very important lesson is relearned by their case #4: her resumption in interest in the small joys of day-to-day life after two years' supression by diazepam pointedly illustrates that these drugs are depressants and have only limited roles in the acute treatment of depression.

The old days are over when the doctor thought that the hypnotizing glint reflected from a teaspoon of elixer of phenobarbital had a more important therapeutic effect than the placebo amount of 15 mg. phenobarbital. The patient doesn't have to be an underground user to innocently learn that 2 QID satisfies much more nicely than 1 PRN. And it takes us much less time to renew prescriptions than to honestly try to educate patients away from chronic sedative use.

Yet those of us responsible for the first line treatment of the large numbers of victims of anxiety must conscientiously spend the time and effort necessary to protect our patients from the harmful use of drugs.

AEO

FROM THE EDITOR'S NOTEBOOK

Notes of medical and professional interest from a cross-section of America's journals.

More Smoke

Recently I had lunch with friends at Jason's in Eastchester, New York. The lentil soup was excellent but what impressed me more was the large sign atop the cigarette vending machine which read: THE PROFITS FROM THIS MACHINE ARE DONATED TO THE AMERICAN CANCER SOCIETY. I found this interesting, somewhat amusing, and wondered what deterrent force it had on the potential purchaser. I also wondered if some institutions (hospitals in the Louisville area) that banned the sale of tobacco on their premises would consider re-installing the machines and contributing the profits as Jason has done. Could this be help for those who do not help themselves?

Early tobacco vending was done by Nicot, French Ambassador to London, who according to André Maurois (in "The Miracle of America," Harper & Brothers, 1944) sent tobacco leaves to Queen Catherine de Medici and established his name in nicotine.

* * * *

Bumper Stickers

Waiting impatiently at a stop signal recently, I noted a double bumper sticker on the car ahead of me. The first sticker read, I AM A MILK DRINKER and next to it was the second, MILK DRINKERS MAKE BETTER LOVERS. The double entendre was a bit delayed in coming to me but I assumed the youth at the wheel of the car was bragging or advertising or both. I had forgotten the bumper sticker postulate until I read where Gorden et al[1] had administered alcohol to normal male volunteers and studied the results. They noted a decrease in testosterone secretion, a decrease in mean plasma concentration of testosterone, and overall decreased production rates. With continued alcohol use there was increased clearance rates of testosterone and increased testosterone A-ring reductase levels in the liver. In the same journal an editorial[2] states, "The clinical effects of alcohol ingestion on male sexual function are overt. Corresponding changes in women may have a more subtle clinical expression." And in an excellent article[3] in the same issue on the treatment of Parkinsonism, I see that levodopa has a central stimulant effect that increases sexual interest. To maintain a balance, if your favorite bartender or host asks, "What'll you have?", drink a milk punch (a jigger of bourbon in milk with sugar added) and swallow a levodopa tablet or two or three or——.

Another bumper sticker had medical malpractice relevance, SUPPORT YOUR LOCAL TRIAL ATTORNEY, SEND A CHILD TO MEDICAL SCHOOL. But the bumper sticker to end all others read simply BUMPER STICKER.

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2. Van Thiel, D.H., Lester, R. Sex and Alcohol: A Second Peek. *N. Engl. J. Med.* 295:893, 1976.
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* * * *

Book Non-Review

"World of Our Fathers" by Irving Howe with the assistance of Kenneth Libo (Harcourt Brace Jovanovich. 714 pages. $14.95) has been on the best seller list (nonfiction) both locally and nationally for several weeks. The book deserves this prestigious status and even more, because it is a magnificent treatment of a portion of our national growth and development. The time span is from 1881 to 1915 and, as the subtitle of the book suggests, it is the story of East European Jews, mostly from Russia and Poland, their journey to this country, their settlement here, and their influence on America and America's influence on them. There are many excellent old photographs that alone tell a dramatic story and these are placed effectively near the end of each of the first three quarters of the book.

Because of its general contemporary history plus the beautiful prose (Howe is Professor of English at Hunter College in New York) I read this near-tome-size book with more-than-usual eagerness. The whole story and an example of its outstanding readability is contained in Howe's statement about the immigrant Jews: "Like a tightly gathered spring trembling with unused force, their life had been held in for centuries. Once settled in America and past the initial traumas, they released the energies of generations, and with these energies, a hunger to taste and acquire goods of this world: money and culture, power and spirit." Howe with keen analytic skill provides a clever dissection of the Jewish personality and synthesizes it realistically with traits that enhance existing admiration and respect for the Jewish people.

For the Jew scholarship was honored above all else —manual labor was frowned upon! To succeed he must work hard and long—as long and as hard as the Gentile. "The hunger for knowledge was widespread, and among a few it rose to a fierce and remarkable passion." Even in civil service examinations "their examination

papers are so immeasurably superior to the average offered by representatives of other races." And the Jews turned to the professions: "A study of Jewish graduates of medical schools in ten American cities shows that from 1881 to 1885 there were 25." The numbers grew rapidly as would be expected; from 1916 to 1920 there were 1,273. "In a 35-year period the number of medical graduates increased fifty times!" Our profession is blessed to have them as contributing colleagues at all levels; their contributions to medical science are legendary.

Howe refers with some humor to the personality of the Jew that is of medical interest: "is there a time when a Jew is not in need of a doctor?", "The emotionality of the Jews, often regarded with distaste by sophisticated Gentiles and embarrassment by emancipated Jews.", "They become, as Jews will, hypochondrical, discussing their symptoms as if counting their assets. . ." But there were organic problems also. Because of crowding in the slums on the East side of New York City where most of the immigrants settled, tuberculosis was rampant and was named the Jewish disease. They were overworked and susceptible to neurasthenia, hysteria, breakdown. "Suicide, infrequent in Eastern Europe, became a serious problem in the new world." But "with characteristic self-denial and abstinence they were spared the ravages of alcohol." Some women employed in the garment shops developed spinal curvatures lifting 25-pound pressing irons!

Although medicine and disease are not listed in the index, there is much of medical interest in this book—direct and indirect. And there is much more: there is an interesting glossary of Yiddish terms; there are the social, political, and economic aspects of the Jew and his start in America. The Yiddish Word, Culture, and Press are covered thoroughly and interestingly, and especially the Yiddish Theater. And in the epilogue—"Questions upon Questions" there is a bit of philosophy—sad but wholesome and consistent. The author ends thusly: "Here in these pages, is the story of the Jews, bedraggled and inspired, who came from Eastern Europe. Let us now praise obscure men." Reading this fine book will increase wisdom, dissolve your prejudice, and create great admiration and greater respect for the Jew.

BOOK REVIEW

USAFFE: Saga of the Fall of the Philippines, the Death March, Japanese Imprisonment and Survival by Alvin C. Poweleit, M.D., 1975, 182 pages.

This hard cover volume, privately published a third of a century after the fact, is an arresting and gripping extension of a diary from 1941 through 1945. It is the story of the desperate plight and survival of a man, who was fortunately a knowledgeable and practical physician, as the United States was forced to its knees in the Philippines. Those of younger years, and less involved in these almost unbelievable trials, should read these pages 'lest we forget' the real roles of many Americans and faithful Phillipinos serving a cause against subjugation.

The style is simplistic, frequently with only a few sentences or a paragraph under the date line of each successive day. Because no one individual can acquire full perspective on an action such as the Philippine campaign, Doctor Poweleit does insert a few, appropriate notes from other individuals committed in conpanion situations. These were sometimes no more than the distance from the forward hold to the aft hold in a ship crammed with literally hundreds of prisoners heading north. At other times the distances are geographically as far as across the island or ideologically as far as the International Military Tribunal for the Far East.

There emerges remarkable examples of the absolute necessity to think ahead, to plan ahead, and to anticipate the unexpected. The Japanese sailor who began teaching him the Japanese language shortly after shipping out on October 27, 1941, enabled Doctor Poweleit later to gain medical recognition and survival contact with his captors. Similarly, an early medical reconnaissance of the island prepared him to understand differences of the terrain and water supply. His early acquisition and study of the "Fauna and Flora of the Philippines" enabled him to learn the edible growth of the island and intermittently sustained his life.

The book is in every sense of the word a saga and a chilling reminder. You will never forget the meaning of its pages.

Arthur H. Keeney, M.D., D.Sc.

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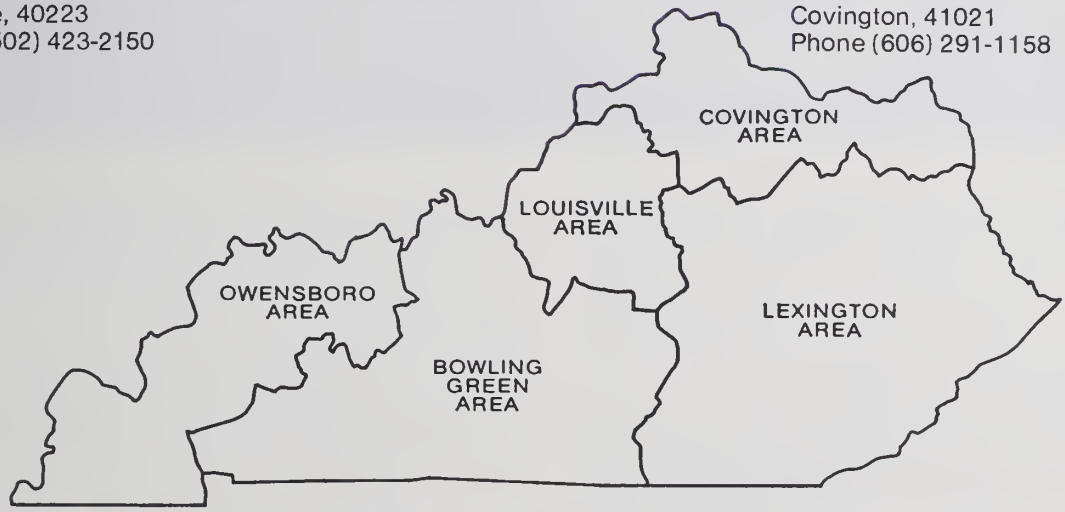

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MATERNAL MORTALITY



From the Files of the KMA Maternal Mortality Study Committee

—Edited by John W. Greene, Jr., M.D.

3-75. The patient was a 17-year-old white female, gravida 1, para 0, at term. She had a sudden onset of severe abdominal pain with cramping which was severe enough to cause her to fall to the floor and bruise her hip. She became very short of breath, turned blue, and was rushed to a local hospital by ambulance.

Significant past medical history includes a history of rheumatic fever with some shortness of breath on exertion. Physical examination was general. The patient was an overweight young female in shock. She was cyanotic and diaphoretic. Vital signs: pulse 100, temperature 98, and respirations 28. Cardiovascular examination revealed muffled and rapid heart sounds. Abdominal examination revealed a tender uterus; no fetal heart tones were heard. Genitourinary examination revealed no vaginal bleeding. The impression was an abruptio placenta. Intravenous fluids were begun; she was rushed to the operating room and induced with a small amount of anesthesia. When the endotracheal tube was inserted, her cyanosis deepened. External cardiac massage and artificial respirations were instituted. The patient's pupils were dilated. There was cessation of all cardiac action on the monitor; no fetal heart tones were heard at this time. An immediate Cesarean section was performed at this time with the delivery of a depressed female infant. The amniotic fluid contained dark blood and the placenta was surrounded by dark clots. The uterus was closed with a running 0 chromic catgut suture.

An autopsy was obtained which indicated that death was due to cardiac tamponade secondary to hemorrhage into the pericardial sac. A complete autopsy revealed coarctation of the aorta in the ascending branch of the arch of the aorta. The portion of the aorta between the aortic valve and the coarctation was markedly dilated. The wall was extremely thin, however, no distinct rupture was grossly apparent. Two small hematomas were present on the right auricle where a tear in the auricle had occurred.

Final Diagnosis:
1. Coarctation of the aorta
2. Marked aneurysmal dilatation of the ascending aorta with rupture.

Comment

The Committee classified this as an obstetrical death with possible preventable factors. It is realized that insufficient material was presented to the Committee to make a definite disposition. Information is not given to the Committee as to whether prenatal care was given or sought. Likewise, we do not know if the diagnosis of coarctation of the aorta had been made prior to her admission to the hospital.

Recent literature[1,2] concerning coarctation of the aorta states that if there are no complications other than the coarctation of the aorta, the pregnancy should be managed as a "normal pregnancy." However, if there is other heart disease that coexists such as valvular heart disease, the risk of death secondary to congestive heart failure, may necessitate or indicate voluntary interruption of the pregnancy for the maternal mortality is great. However, if these do not exist, the consensus is that the patient should be treated as other cardiac lesions. That is, the labor should be as short as possible, adequate analgesia given, and forcep delivery carried out to make the second stage of labor as short as possible. It has been stated that aortic rupture is most likely to occur late in pregnancy or in the early puerperium. Cesarean section should be limited to those patients who present with obstetrical indications, rather than coarctation of the aorta alone. Correction of the coarctation during pregnancy is

being done to prevent rupture or dissection. However, fetal loss is high because of the decreased uterine blood flow that occurs during such an operative procedure.

The diagnosis of coarctation of the aorta in a young person may be difficult since many are not hypertensive. One must seek the presence of a femoral or popliteal pulse to determine the absence or presence of a coarctation. In the present case it would seem that abruption of the placenta occurred because of inadequate uterine blood flow. Cases of abruptio placenta have been reported following the supine hypertensive syndrome that this patient may have undergone.

It is felt by the Committee that had this person had adequate prenatal care (which we are not knowledgeable about), the diagnosis could have been made by the physical examination. Likewise, we do not know if she had any other complications such as early toxemia of pregnancy present, which would have made this a very high risk pregnancy, or if there were other coexisting cardiac conditions which would further complicate the case. The death seemed to be the result of aortic rupture and cardiac tamponade which made attempts at resuscitation useless. We should not be seeing many of these cases in the future since pediatricians are now alerted to this entity which hopefully will be corrected before the childbearing years.

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1. Szekely, Paul and Snaith, L.: Heart Disease in Pregnancy, Churchill, Livingstone, Edinburgh and London, 1974.
2. Williams, 15th Edition, Pritchard, J. and MacDonald, P. Appleton-Century-Croft, New York, 1976.

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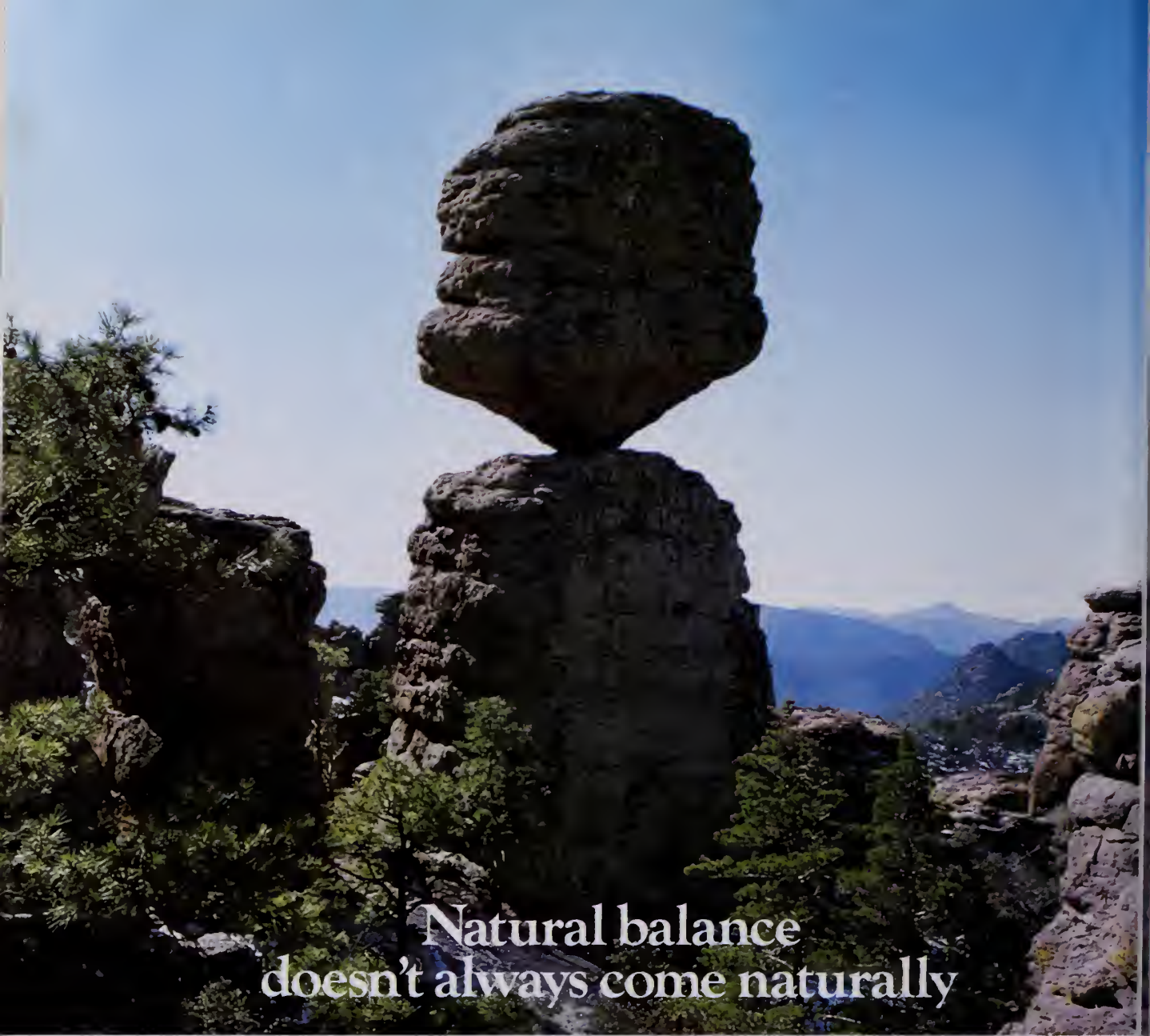
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WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, pa should be warned of this possibility and cautioned against driving a car or ope dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in ch have not been done; therefore, usage is not recommended in the pediatric age gro

Usage in Pregnancy: See "Contraindications."

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ORGANIZATION SECTION

Drs. Stewart, Baird Named To Top KMA Offices

The KMA House of Delegates elected John P. Stewart, M.D., Frankfort, to the office of President-Elect for the 1976-77 Associational year. John M. Baird, M.D., Danville, was re-elected Vice-President.



Doctor Stewart

KMA President, Paul J. Parks, M.D., Bowling Green, took the oath of office during the President's Luncheon on September 29. He succeeds David A. Hull, M.D., Lexington.

Doctor Stewart, a radiologist at King's Daughters Memorial Hospital in Frankfort, is the immediate past Chairman of the Board of Trustees, having served as a Trustee from the Seventh District since 1973. A past President of the Fayette County Medical Society, Doctor Stewart is a former Chairman of the Committee on State Legislative Activities and a former Board member of KEMPAC. Doctor Stewart follows the medical tradition set by his father and grandfather, both physicians. His grandfather, John Quincy Adams Stewart, served as KMA President in 1894.

A family physician, Doctor Baird is now serving his second term as KMA Vice-President. He is a former Chairman of the Scientific Exhibits Committee and currently serves on the Committee on Medicare and Other Governmental Medical Programs. A member of the Kentucky and American Academy of Family Physicians, Doctor Baird serves as Medical Director of the McDowell Home Health Agency and the Boyle County Family Planning Clinic.

In other elections, Bennett L. Crowder, II, M.D., Hopkinsville, was chosen to serve as Vice-Speaker of the House of Delegates for one year, filling an unexpired term left vacant by the resignation of Richard B. McElvein, M.D. Doctor Crowder also serves as KMA Parliamentarian.

Elected to two-year terms as Delegate and Alternate Delegate to the AMA were Harold D. Haller, M.D. and Kenneth P. Crawford, M.D., both of Louisville. They will assume office on January 1, 1977. Chosen to serve a one-year-term as Alternate AMA Delegates were Wally O. Montgomery, M.D., Paducah, and Lee C. Hess, M.D., Florence. Doctors Montgomery and Hess are filling unexpired terms and assumed office upon election.

Trustees Name Dr. Holloway, Dr. Bushey To Head Board

James B. Holloway, Jr., M.D., Lexington, Tenth District Trustee since 1974 and Vice-Chairman of the Board in 1975, was elected Chairman of the KMA Board of Trustees at its first meeting on September 30. Doctor Holloway succeeds John P. Stewart, M.D., Frankfort, in this office. Named as Vice-Chairman was Harold L. Bushey, M.D., Barbourville.



Doctor Holloway



Doctor Bushey

A general surgeon, Doctor Holloway was KMA Vice-President in 1972-73 and has served on numerous committees of the Association. He presently is an Associate

COMPARATIVE REGISTRATION FIGURES

KMA Annual Meetings

Louisville

	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976
KMA Members	957	1011	1056	1013	1186	940	929	918	1093	1088
Guest Physicians	152	153	149	130	149	142	138	116	152	151
Interns-Residents	94	103	95	101	70	119	103	81	74	78
Medical Students	222	185	218	245	233	234	234	150	198	237
Registered Nurses	24	42	27	48	30	41	61	38	46	40
Exhibitors	272	256	305	280	269	241	240	251	253	298
Guests	115	332	339	379	356	364	405	335	405	403
Technicians—	31	29	39	32	36	34	30	31	37	42
Office Assts.										
TOTAL ATTENDANCE	1867	2111	2228	2228	2329	2115	2140	1920	2258	2337

Clinical Professor of Surgery at the University of Kentucky Medical Center and has been engaged in the private practice of surgery in Lexington since 1964. A past President of the Fayette County Medical Society, Doctor Holloway is a Fellow of the American College of Surgeons.

Doctor Bushey, Trustee from the Fifteenth District since 1972, previously served as an Alternate Trustee and a KMA Delegate. He has practiced internal medicine in Barbourville since 1959 and in 1973 was honored by the Knox County Chamber of Commerce as "Outstanding Citizen of the Year." A member of the Knox County Health Department, Doctor Bushey is extremely active in numerous civic organizations.

Newly-elected members of the Board of Trustees are:

R. J. Phillips, M.D., Owensboro, Second District
William H. Keller, M.D., Frankfort, Seventh District
Don R. Stephens, M.D., Cynthiana, Ninth District
Howard B. McWhorter, M.D., Ashland, Thirteenth District

Auxiliary Installs Mrs. Rollings, Elects Mrs. Tom Hall

Mrs. R. Parnell Rollings, Louisville, was installed as President of the Auxiliary to KMA at its Annual Convention held September 27-29 in Louisville. The Auxiliary elected Mrs. Tom Hall of Bowling Green to the office of President-Elect.

Mrs. Rollings succeeds Mrs. Wally O. Montgomery, Paducah, who presided over the three-day convention.

Other elected officers of AKMA for the 1976-77 Associational year are: Mrs. Gordon Betts, Somerset, 1st Vice-President; Mrs. Kenneth Tufts, Lexington, 2nd Vice-President; Mrs. Bennett L. Crowder, II, Hopkinsville, 3rd Vice-President; Mrs. Frank Garamy, Villa Hills, 4th Vice-President; Mrs. Charles Nicholson, Lexington, Treasurer; and Mrs. Maurice Mueller, Ft. Mitchell, Recording Secretary.

The primary goal of the Auxiliary is to assist KMA in its work for the advancement of health care in Kentucky. There are now 28 organized auxiliaries with a membership of over 1450, and 103 members-at-large.

The Fall Conference and Board Meeting of AKMA was held on November 9-10 at the Drawbridge Motor Inn in Ft. Mitchell.



Officers for the 1976-77 Associational year are (left to right): S. Randolph Scheen, M.D., Louisville, Secretary-Treasurer; Paul J. Parks, M.D., Bowling Green, President; John M. Baird, M.D., Danville, Vice-President; and John P. Stewart, M.D., Frankfort, President-Elect.



The 1976 Award recipients are congratulated by Awards Chairman, Fred C. Rainey, M.D., Elizabethtown (center) after the President's Luncheon, September 29. The Distinguished Service Award was presented to Wyatt Norvell, M.D., New Castle (left) and Robert G. Cox, Louisville, KMA Executive Vice President, (right) received the Kentucky Medical Association Award.

Dr. Norvell, Mr. Cox Presented KMA's Top Awards

Wyatt Norvell, M.D., New Castle, and Robert G. Cox, Louisville, are the 1976 recipients of the Kentucky Medical Association's two highest awards. Presented during the President's Luncheon on September 29, the Distinguished Service Award went to Doctor Norvell and the Kentucky Medical Association Award to Mr. Cox. Fred C. Rainey, M.D., Elizabethtown, Chairman of the Awards Committee, made the presentations.

Honored for a "career that has been dedicated to his family, his patients, his country, and his profession," Doctor Norvell's service to the Association for over 25 years includes being Vice-President, Trustee, Chairman and Vice-Chairman of the Board, AMA Delegate, and member and chairman of numerous KMA committees. A family physician, he has served on the Blue Shield Board of Directors, being its chairman from 1970 to 1972. An active leader in civic and church affairs in his community, Doctor Norvell was recently named "New Castle Citizen of the Year."

Mr. Cox, KMA's Executive Vice President, was honored for "his ability to represent organized medicine, to realistically achieve the goals set for our Association, and to serve the membership in an efficient and professional manner." Having been with KMA since 1962, Mr. Cox has served in many capacities at the state and national level. He is a member and past director of the Kentucky Chamber of Commerce and serves on the Blue Shield Board as Secretary of Kentucky Physicians Mutual. Mr. Cox is Treasurer of the Professional Convention Management Association and is a member of the Board of Directors of the American Association of Medical Society Executives. He serves on the AAMSE Advisory Committee to the AMA Executive Vice President and was invited by the AMA this past spring to join a group selected to study the British Health System.

Highlights of the House of Delegates

The complete proceedings of the 1976 KMA House of Delegates will be published in the December issue of *The Journal of KMA*. Listed below are capsule highlights of some of the important matters discussed and acted upon at the final session on September 29, 1976:

* At its final meeting, the House was in session for seven hours.
* Voted support of voluntary CME but reversed its 1974 recommendation that CME be tied to re-licensure.
* Directed that the Board of Trustees establish a mechanism to evaluate and record CME programs offered and completed by every physician.
* Established a Committee on Health Care Costs as a standing committee of the Association.
* Approved the concept of a Kentucky Medical Insurance Association to assume the availability of medical liability insurance for its members. Implementation of this concept is dependent upon the continuing study and demonstrated need as determined by the Board of Trustees.
* Voted a change in the Bylaws so as to require "unified membership" in the American Medical Association, KMA, and the county medical society.
* Passed a resolution directing the Board of Trustees to ask the Medicare Part B Intermediary in the Commonwealth to seek a single state classification for physician reimbursement.
* Changed the title of the Executive Director to Executive Vice President.
* So that the Association may continue to benefit from the interest, knowledge, and judgment of those who have served in high office, the House voted that the five immediate living past presidents and vice presdents be made voting members of the House, and that all other living past presidents and past chairmen of the Board be ex-officio members of the House without voting privileges.

Drs. Lane, Bell To Head Thoracic, Lung Groups

The Kentucky Thoracic Society and the Kentucky Lung Association elected Emery E. Lane, M.D., and Jesse B. Bell, M.D., both of Louisville, as their respective Presidents during their fall meeting held October 8-9 in Louisville.

Doctor Lane, Pulmonary Disease Specialist and Professor at the University of Louisville School of Medicine, is joined by Richard P. O'Neill, M.D., Lexington, President-Elect; and Robert W. Powell, M.D., Louisville, Secretary-Treasurer, to head the Kentucky Thoracic Society for the 1976-77 year.

Active in numerous health organizations, Doctor Bell serves on the Governor's Advisory Council of Human Resources and is a past president of the Louisville and Jefferson County Health Association and the Louisville Lung Association.



John P. Stewart, M.D., Frankfort, makes his way to the podium after he was named as KMA President-Elect. Hoyt D. Gardner, M.D., Louisville, (left) and Fred C. Rainey, M.D., Elizabethtown, (right), as former KMA Presidents, accompanied Doctor Stewart.

KMA Board Reaffirms Support Of Ban On Advertising

The KMA Board of Trustees on September 26, 1976, reaffirmed its support of the long-standing policy of the American Medical Association in its Principles of Medical Ethics prohibiting the solicitation of patients by physicians.

Brought to the attention of the Board by the KMA Judicial Council, these Principles of Medical Ethics are intended to discourage abusive practices that exploit patients and the public and interfere with freedom in making an informed choice of physicians and permitting free competition among physicians.

1977 Nominating Committee Chosen by Delegates

Five physicians were elected by the House of Delegates at its final session on September 29 to serve on the 1977 Nominating Committee.

Committee members were: William N. Richardson, M.D., Cadiz, Chairman; Walter R. Brewer, M.D., Lexington; Danny M. Clark, M.D., Somerset; Elmer H. Jackson, M.D., Danville; and Paul J. Sides, M.D., Lancaster.

The Committee is responsible for presenting a slate of candidates for all elective offices within the structure of KMA to the House of Delegates at the 1977 Annual Meeting.

Was Your Delegate Present?
ROLL CALL —
1976 House of Delegates
KMA Annual Meeting

OFFICERS

		First Session	Second Session
Speaker	Carl Cooper, Jr.	Present	Present
Vice-Speaker	Bennett L. Crowder, II	Present	Present
President	David A. Hull	Present	Present
President-Elect	Paul J. Parks	Present	Present
Vice-President	John M. Baird	Present	Present
Secretary-Treasurer	S. Randolph Scheen	Present	Present
Delegate to AMA	J. Thomas Giannini	Present	Present
Delegate to AMA	Fred C. Rainey	Present	Present
Delegate to AMA	David B. Stevens	Present	Present
Alternate Delegate to AMA	Charles G. Bryant	Present	Present
Alternate Delegate to AMA			
Alternate Delegate to AMA			
Parliamentarian	Bennett L. Crowder, II	Present	Present

TRUSTEES

District			
First	W. Eugene Sloan	Present	Present
Second	Charles C. Kissinger	Present	Present
Third	Frank R. Pitzer	Present	Present
Fourth	Charles B. Spalding	Present	Present
Fifth	Cecil L. Grumbles	Present	Present
Sixth	Earl P. Oliver	Present	Present
Seventh	John P. Stewart	Present	Present
Eighth	Richard J. Menke	Present	Present
Ninth	James L. Ferrell	Present	Present
Tenth	James B. Holloway, Jr.	Present	Present
Eleventh	Dwight L. Blackburn	Present	Present
Twelfth	William T. Watkins	Present	Present
Thirteenth	J. Wesley Johnson	Present	Present
Fourteenth	Jerry D. Fraim	Present	Present
Fifteenth	Harold L. Bushey	Present	Present

ALTERNATE TRUSTEES

District			
First	Keith E. Ellis	Present	Present
Second	Kenneth M. Eblen	Present	.....
Third	Henry R. Bell	Present	Present
Fourth	Terrell D. Mays	.....	.....
Fifth	Glenn W. Bryant	.....	.....
Sixth	Martin Wilson, Jr.	Present	Present
Seventh	William H. Keller	.....	Present
Eighth	Robert C. Smith	Present	Present
Ninth	Don R. Stephens	Present	Present
Tenth	Richard F. Hench	Present	Present
Eleventh	Robert L. Davis	.....	.....
Twelfth	John M. Baird	Present	Present
Thirteenth	Arthur B. Richards	Present	Present
Fourteenth	Harvey A. Page	Present	Present
Fifteenth	Walter H. Stepchuck	Present	Present

PAST PRESIDENTS

Past President	Hoyt D. Gardner	Present	Present
Past President	Fred C. Rainey	Present	Present
Past President	Lee C. Hess	Present	Present
Past President	John S. Harter	Present	Present
Past President	John C. Quertermous	Present	.....

DELEGATES

First District

BALLARD			
CALLOWAY	R. Gary Marquardt	Present	Present
CARLISLE			
FULTON			
GRAVES	C. Douglas Leneave	Present	Present
HICKMAN	C. J. Mills	.....	.....
LIVINGSTON	Stephen Burkhart	.....	.....
McCRACKEN	Charles J. Bohle	Present	Present
	James C. Embry	Present	Present
	Wally O. Montgomery	Present	Present
MARSHALL	Keith E. Ellis	Present	Present

Second District

DAVIESS	James Baumgarten	Present	Present
	Albert H. Joslin	Present	Present
	William E. Pearson	Present	Present
	Glen Richards	.....	Present
	Marilyn Sanders (Alt.)	Present	.....
HANCOCK	B. Presley Smith, II	.....	.....
HENDERSON	Kenneth M. Eblen	Present	.....
	John W. McClellan	Present	Present
McLEAN			
OHIO	Robert E. Norsworthy	Present	Present
UNION	Darrell Vaughn	Present	.....
WEBSTER			

Third District

CRITTENDEN			
HOPKINS	Wallace R. Alexander	.....	.....
	James G. Gulley	Present	Present
	William Klompus (Alt.)	Present	.....
PENNYRILE MULTI-COUNTY SOCIETY			
CALDWELL	N. H. Talley	Present	Present
CHRISTIAN	Robert Amis	Present	Present
	Carl Caplinger	.....	.....
	Delmas M. Clardy (Alt.)	Present	Present
LYON	Steve B. Hiland	.....	.....
MUHLENBERG	Gary D. Givens	.....	.....
	James S. Brashear (Alt.)	Present	Present
TODD	Larry O. Brock	Present	.....
TRIGG	John Collins (Alt.)	Present	Present
	Nat Richardson	.....	.....

Fourth District

BRECKINRIDGE			
BULLITT	W. B. Hamilton	Present	Present
GRAYSON	Charles L. Bland	.....	Present
GREEN	Harry B. Huntsman	Present	Present
HARDIN	Thomas J. FerrielI	Present	.....
	Larry Hall	Present	Present
HART	George B. Boeckmann	Present	Present
LARUE	Marion A. Douglass, Jr.	.....	Present
MEADE			
NELSON	Emmett W. Wood	.....	.....
TAYLOR	Henry F. Chambers	Present	Present
WASHINGTON			

Fifth District

JEFFERSON	Robert E. Arnold	.....	Present
	Joseph C. Babey	.....	Present
	James G. Baker	.....	Present
	Alan M. Bornstein (Alt.)	.....	Present
	William C. Buschemeyer, Jr.	Present	Present
	Peter C. Campbell, Jr.	Present	Present
	E. Dean Canan	.....	Present
	Samuel H. Cheng	.....	Present
	Ronald G. Chism	.....	Present
	Clinton C. Cook, III	Present	Present
	Kenneth Crawford (Alt.)	Present	.....
	James W. Curry	Present	Present
	Bob DeWeese (Alt.)	.....	Present
	Michael B. Flynn	Present	Present
	Henry D. Garretson (Alt.)	.....	Present
	Darius Ghazi	Present	Present
	Leonard A. Goddy	.....	.....
	Harold D. Haller	Present	Present
	Terry W. Henkel	Present	Present
	R. Brooks Howard	Present	Present
	Robert S. Howell (Alt.)	.....	Present
	Richard K. Jelsma	.....	Present
	Arthur H. Keeney	Present	.....
	Ferrel C. Lowrey, Jr.	Present	Present
	Joseph C. Marshall	Present	Present
	James P. Moss	Present	Present
	Charles R. Oberst	.....	Present
	Lynn L. Ogden	Present	Present
	William J. Oliver	.....	Present
	C. Ray Potts	Present	Present
	B. Frank Radmacher	Present	Present
	Bernard O. Rand	Present	Present
	Ben Reid, Jr. (Alt.)	.....	Present
	Anne C. D. Richman	.....	Present
	R. Parnell Rollings	Present	Present
	Charles B. Severs	.....	Present
	David C. Shipp	Present	Present
	Charles C. Smith, Jr. (Alt.)	.....	Present
	David L. Stewart	Present	Present
	Thomas G. Stigall	.....	.....
	T. Bodley Stites	Present	Present
	Gerald D. Temes	Present	.....
	Walter L. Thompson	.....	Present
	Lucy S. Tyler	.....	Present
	Walter L. Wilson	Present	Present
	Marvin A. Yussman	.....	.....

Sixth District

ADAIR	George O. Nell	Present	Present
ALLEN	Earl P. Oliver	Present	Present
BARREN	Daryl Harvey (Alt.)	.....	Present
	Paul York, Jr.	.....	.....
BUTLER	Richard T. C. Wan	Present	Present

CUMBERLAND	Joseph Schickel	.....	Present
EDMONSON			
LOGAN	C. V. Dodson	Present	.....
METCALFE	Lawrence P. Emberton	.....	.....
MONROE	William R. Bushong	Present	.....
SIMPSON	J. Michael Pulliam	Present	Present
WARREN	John Blackburn	Present	Present
	John Downing	Present	Present
	Martin Wilson, Jr.	Present	Present

Seventh District

ANDERSON	H. Boyd Caudill	.....	.....
CARROLL	Cecil Martin	Present	Present
FRANKLIN	Branham B. Baughman	Present	Present
	Carl Shroat	Present	Present
GALLATIN			
GRANT	Darl B. Shipp	.....	.....
HENRY	Wyatt Norvell	Present	Present
OLDHAM	Ed Houchin	Present	Present
OWEN	O. A. Cull	.....	.....
SHELBY	Donald Chatham	Present	Present
SPENCER	William K. Skaggs	.....	.....
TRIMBLE	Carl Cooper, Jr.	Present	Present

Eighth District

BOONE	Herbert Booth	.....	.....
CAMPBELL-KENTON			
	Carl Brueggemann (Alt.)	Present	Present
	Howard Heringer, Jr. (Alt.)	Present	.....
	Paul H. Klingenberg	.....	Present
	William Monnig (Alt.)	Present	Present
	Robert E. Smith	Present	Present
	John R. Stevie	Present	Present
	Fred A. Stine	Present	Present
	R. Timmerman	Present	Present

Ninth District

BATH	Robin A. Byron	.....	.....
BOURBON	Harry L. Galloway	Present	Present
BRACKEN	James M. Stevenson	.....	.....
FLEMING	Robert Fidler	Present	Present
HARRISON	Don R. Stephens	Present	Present
MASON	R. M. Blake	.....	Present
NICHOLAS	Allen J. Hamon	.....	.....
PENDLETON	Robert L. McKenney	.....	Present
ROBERTSON			
SCOTT	Gus A. Bynum	Present	Present

Tenth District

FAYETTE	Harry L. Bailey (Alt.)	Present	Present
	Leslie W. Blakey	Present	Present
	M. Cary Blaydes	Present	Present
	Peter P. Bosomworth	Present	.....
	Walter R. Brewer	.....	Present
	Thomson R. Bryant Jr.	Present	Present
	P. Raphael Caffrey	.....	Present
	Colby N. Cowherd	Present	Present
	Melvin L. Dean	Present	Present
	Glenn U. Dorroh	Present	Present
	Richard D. Floyd	Present	Present
	Ward O. Griffen, Jr.	.....	.....
	Allen E. Grimes, Jr.	Present	Present
	Walter Harris	.....	Present
	C. N. Kavanaugh	Present	Present
	Carl H. Scott	Present	Present
	John M. Stoeckinger	Present	Present
	Robert Thompson (Alt.)	.....	Present
	John E. Trevey	Present	Present
JESSAMINE	Phyllis D. Corbitt	Present	.....
WOODFORD			

Eleventh District

CLARK	Bennett Asher	Present	Present
ESTILL	Charles E. Terry	.....	.....
JACKSON	Philip R. Curd	.....	.....
LEE	Arnold L. Taulbee	.....	.....
MADISON	Don F. Cloys	Present	Present
	Linda Fagan	Present	Present
MENIFEE			
MONTGOMERY			
OWSLEY	Carl W. Noble	.....	.....
POWELL			
WOLFE	Paul F. Maddox	.....	.....

Twelfth District

BOYLE	Elmer H. Jackson	Present	Present
CASEY	Lewis E. Wesley	Present	Present
CLINTON	Floyd B. Hay	Present	Present



J. Ed McConnell, former President of Kentucky Blue Cross and Blue Shield, delighted the audience of some 300 physicians and guests at the President's Luncheon, September 29. He spoke on the many facts and facets of life in Kentucky.

GARRARD	Paul J. Sides	.....	Present
LINCOLN	Charles C. Crase	Present	Present
McCREARY	John A. L. Patton	.....	.....
MERCER	Bacon R. Moore, III	.....	.....
PULASKI	J. Roy Biggs	Present	Present
	Danny M. Clark	Present	Present
ROCKCASTLE	George W. Griffith	.....	.....
RUSSELL	Charles E. Peck	.....	.....
WAYNE			

Thirteenth District

BOYD	J. Marvin Keeton	.....	Present
	Wiley Kozee	Present	Present
	Paul Lett (Alt.)	Present	.....
	J. E. Moore	Present	Present
CARTER			
ELLIOTT			
GREENUP	S. Gray Hunter	Present	Present
LAWRENCE	Norman E. Edwards	.....	.....
LEWIS			
MORGAN	James D. Frederick	.....	.....
ROWAN	Charles D. Franks	Present	Present
	John L. Kiesel	Present	Present

Fourteenth District

BREATHITT	Price Sewell, III	.....	.....
FLOYD	Grady Stumbo	Present	Present
JOHNSON	Franklin K. Belhasen	Present	.....
KNOTT			
LETCHER	William H. Matthew	Present	Present
MAGOFFIN			
MARTIN	Raymond D. Wells	.....	.....
PERRY	Keith W. Cameron	.....	.....
PIKE	Max P. Jones	Present	.....
	Harvey A. Page	Present	Present

Fifteenth District

BELL	Francis A. Forde	Present	Present
	Emanuel H. Rader	Present	Present
CLAY	J. C. Coldiron	Present	Present
HARLAN	Orides Bonadio	Present	Present
	Milo H. Schosser	Present	Present
KNOX	Rogelio A. Acosta (Alt.)	.....	Present
	Rofino F. Crisostomo	Present	.....
LAUREL	Samuel Adams	Present	Present
LESLIE	W. B. R. Beasley	Present	Present
WHITLEY	R. D. Pitman	Present	Present

The information in the Roll Call was taken from the attendance record cards signed by the delegates prior to the meetings of the House, September 27 and 29.

In Memoriam

LOUIS BAER, M.D.
Louisville
1898-1976

Louis Baer, M.D., died on September 29 at the age of 77. A family physician, Doctor Baer had taught at the University of Louisville School of Medicine, where he graduated in 1929. He was an emeritus member of the Jefferson County Medical Society, and the Kentucky and American medical associations.

WARREN E. WHEELER, M.D.
Lexington
1909-1976

Warren E. Wheeler, M.D., died on October 23 at the age of 67. Doctor Wheeler, a 1933 graduate of Harvard University, is a former Chairman of the Department of Pediatrics at the University of Kentucky Medical Center. He is a past Editor of the American Journal of Diseases of Children. A member of numerous pediatric societies, Doctor Wheeler belonged to the Fayette County Medical Society and the Kentucky Medical Association.

NEWS ITEMS

George W. Pedigo, Jr., M.D., Louisville, a Regent of the American College of Physicians, served as official ACP representative to the Illinois Regional Meeting of the ACP on October 16. Doctor Pedigo reported on policies and activities of the College.

Robert C. Long, M.D., Louisville, was recently elected to the Board of Trustees of the American Hospital Association. Doctor Long, a Professor of Obstetrics and Gynecology at the University of Louisville School of Medicine, is a former Trustee of the American Medical Association.

Franklen Belhasen, M.D., Paintsville, was recently appointed to a four-year term on the Kentucky Board of Education. A 1964 graduate of the University of Kentucky Medical Center, Doctor Belhasen has been in family practice in Paintsville since 1966.

Mary Pauline Fox, M.D., Pikeville, was presented the "Distinguished Person of the Year" Award by the Kentucky Nurses Association, at their Annual Banquet on October 21. Doctor Fox is Pike County's health officer.

MEDICARE NEWS: Beginning January 1, 1977, a person who goes to the hospital under Medicare will be responsible for the first $124 of his hospital bill. Presently, the deductible is $104.

IDAA (International Doctors in Alcoholics Anonymous) has formed a chapter in Cincinnati. For further information call (513) 683-8025.

BRIEF SUMMARY OF
PRESCRIBING INFORMATION
ANTIMINTH® (pyrantel pamoate)
ORAL SUSPENSION

Actions. Antiminth (pyrantel pamoate) has demonstrated anthelmintic activity against *Enterobius vermicularis* (pinworm) and *Ascaris lumbricoides* (roundworm). The anthelmintic action is probably due to the neuromuscular blocking property of the drug.

Antiminth is partially absorbed after an oral dose. Plasma levels of unchanged drug are low. Peak levels (0.05-0.13μg/ml) are reached in 1-3 hours. Quantities greater than 50% of administered drug are excreted in feces as the unchanged form, whereas only 7% or less of the dose is found in urine as the unchanged form of the drug and its metabolites.

Indications. For the treatment of ascariasis (roundworm infection) and enterobiasis (pinworm infection).

Warnings. *Usage in Pregnancy:* Reproduction studies have been performed in animals and there was no evidence of propensity for harm to the fetus. The relevance to the human is not known.

There is no experience in pregnant women who have received this drug.

The drug has not been extensively studied in children under two years; therefore, in the treatment of children under the age of two years, the relative benefit/risk should be considered.

Precautions. Minor transient elevations of SGOT have occurred in a small percentage of patients. Therefore, this drug should be used with caution in patients with preexisting liver dysfunction.

Adverse Reactions. The most frequently encountered adverse reactions are related to the gastrointestinal system.

Gastrointestinal and hepatic reactions: anorexia, nausea, vomiting, gastralgia, abdominal cramps, diarrhea and tenesmus, transient elevation of SGOT.

CNS reactions: headache, dizziness, drowsiness, and insomnia. Skin reactions: rashes.

Dosage and Administration. *Children and Adults:* Antiminth Oral Suspension (50 mg of pyrantel base/ml) should be administered in a single dose of 11 mg of pyrantel base per kg of body weight (or 5 mg/lb.); maximum total dose 1 gram. This corresponds to a simplified dosage regimen of 1 ml of Antiminth per 10 lb. of body weight. (One teaspoonful=5 ml.)

Antiminth (pyrantel pamoate) Oral Suspension may be administered without regard to ingestion of food or time of day, and purging is not necessary prior to, during, or after therapy. It may be taken with milk or fruit juices.

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Malpractice Insurance Bill Is Tested By Court Case

Due to the ruling which the Franklin Circuit Court made on September 27, 1976, in regard to SB 248, the following interpretation is printed for your information.

KMA's Interpretation of the Judgment

We have received and reviewed the Opinion and Judgment of the Franklin Circuit Court on the test suit concerning the constitutionality of Senate Bill 248, and we have consulted with our counsel in this regard.

What the court's judgment actually says is that:

No physician or hospital can be required to carry $100,000/$300,000 liability insurance.

The Patients Compensation Fund cannot make loans from the General Fund of the Commonwealth in the event the Patients' Compensation Fund is depleted.

These are the only provisions of SB 248 that the lower court has declared unconstitutional. An appeal will promptly be taken to the Kentucky Supreme Court so this matter can be finalized.

The lower court's opinion and ruling holds that **all other aspects** of SB 248 are constitutional, and, of course, remain in effect. This includes the Patients' Compensation Fund, and the requirement that every physician and hospital belong and contribute to the Fund. Therefore, your umbrella protection has not been taken away.

National Family Week

November 21-27, 1976

Luncheon Address Available

The address J. Ed McConnell made at the 1976 KMA President's Luncheon on September 29 was well received by the approximately 300 members and guests in attendance. Information on obtaining a copy of this speech, "Kentucky—My Kentucky, That Is," is available by contacting the KMA Headquarters Office.

U. K. Seeking Dept. Chairman

A chairman for the Department of Family Practice, University of Kentucky College of Medicine is being sought. Responsibilities include undergraduate medical education, residency program, model Family Practice Unit and research in health care delivery, clinical problems and practice management. Qualifications include Board Certification, significant experience in Family Practice, experience in medical education and administration; vision and capacity for leadership of a growting program, for anticipating change, and encouraging innovation. Write, including vita and other material to: Dr. Robert Straus, Chairman, Family Practice Search Committee, MN-655, College of Medicine, University of Kentucky, Lexington, Kentucky 40506.

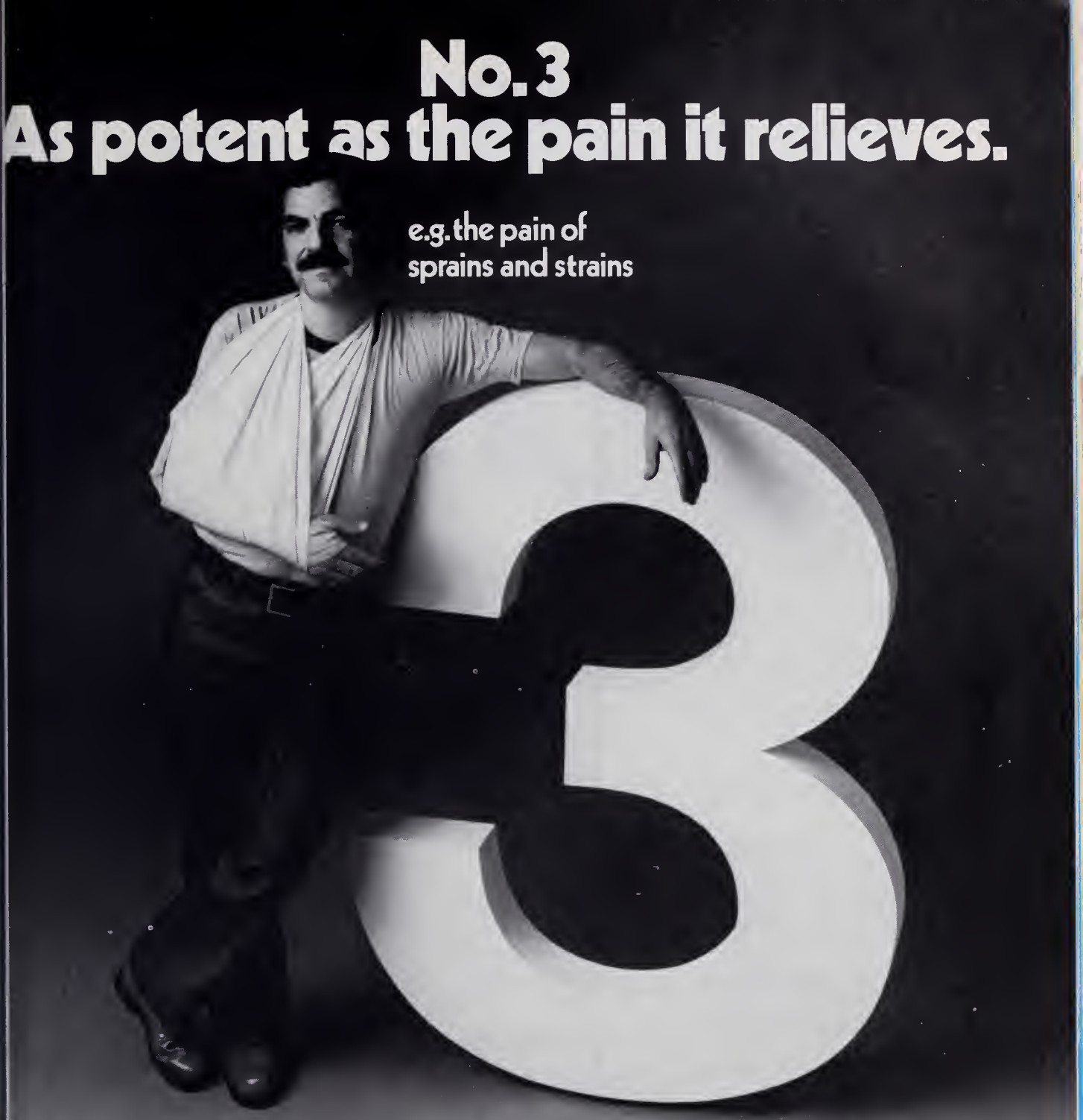
Franklen Belhasen, M.D., Paintsville, was recently appointed to a four-year term on the Kentucky Board of Education. A 1964 graduate of the University of Kentucky Medical Center, Doctor Belhasen has been in family practice in Paintsville since 1966.

Psoriasis

(Continued from page 553)

8. Hunter, G.A., Simmons, I.J., and Thomas, B.M.: A clinical trial of hydroxyurea for psoriasis. *Aust. J. Derm.* 13:93-99, 1972.
9. Dahl, M.G.C., and Comaish, J.S.: Long-term effects of hydrea in psoriasis. *Brit. Med. J.* 4:585-587, 1972.
10. Spier, S., Solomon, L.M., Esterly, N.B., and Fried, W.: Hydroxyurea and Macrocytosis. *Brit. J. Derm.* 89:199-205, 1973.
11. Moschella, S.L. and Greenwald M.A.: Psoriasis with hydroxyurea. *Arch. Derm.* 107:363-368, 1973.
12. Leavell, U.W., Mersack, I.P., and Smith, C.: Survey of the treatment of psoriasis with hydroxyurea. *Arch. Derm.* 107:467, 1973.
13. Touraine, R., Revuz, J., and Tulliez, M.: Psoriasis and hydroxyurea. *Brit. J. Derm.* 86:102, 1972.

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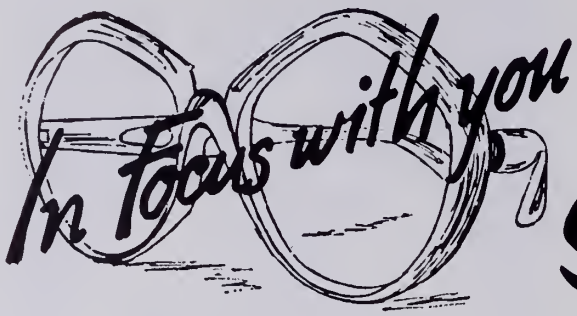
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american cancer society®

Photo. Ray Solowinski



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Narrowing down pneumonias

Upjohn

Bacterial or nonbacterial?

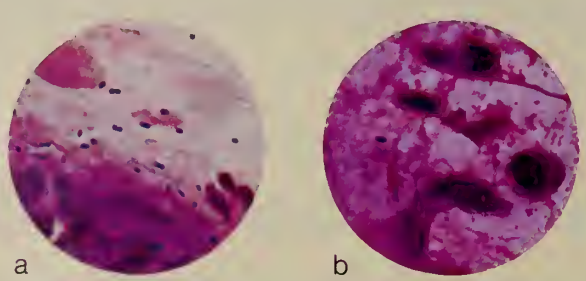
In the early stages of mild to moderate pneumonia, it is often difficult to reach an accurate bacteriologic diagnosis. A tentative differentiation may be made on history-taking, physical examination, CBC with differential analysis, and microscopic study of the sputum smear. Specimens should be obtained for culture and sensitivity testing, but when a bacterial pneumonia is diagnosed, therapy is often instituted before the etiological agent is positively identified.



Bacterial pneumonias may have a sudden onset with a shaking chill, rapid development of fever, pleuritic pain, and cough productive of rust-colored sputum. The Gram-stained sputum smear generally shows polymorphonuclear neutrophils as well as a predominance of the causative organisms. These are likely to be *Streptococcus pneumoniae,* still by far the most frequently encountered agent in bacterial pneumonia.[1] The CBC reveals marked leukocytosis with a shift to the left.

In *nonbacterial pneumonias*—mycoplasmal or viral—classical symptoms tend to develop more slowly, with myalgia, lassitude, and headache predominating. Sputum production is usually scanty, and the sputum smear is relatively uninformative, showing gram-positive cocci and other organisms which are part of the normal pharyngeal flora. The leukocyte count is normal or slightly elevated.

Direct Gram-stained sputum smears. (a) Pneumococcal pneumonia—note abundant polymorphonuclear leukocytes, as well as gram-positive diplococci. (b) Nonspecific—consistent with viral or mycoplasmal pneumonia. Note large mononuclear cell, as well as a few polymorphs and mixed bacterial flora (pharyngeal contaminants).



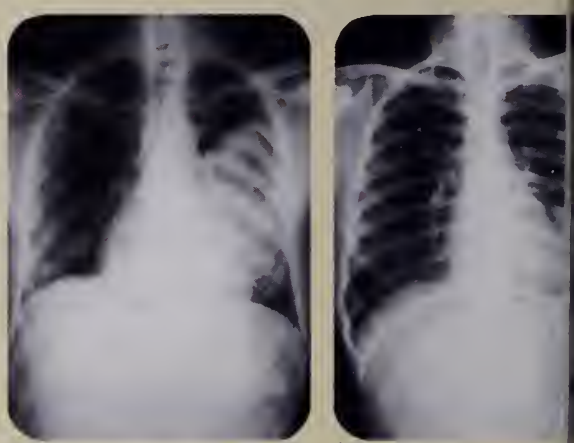
a b

Mycoplasmal or viral?

Differentiation between mycoplasmal and viral pneumonias may be impossible in the acute sta

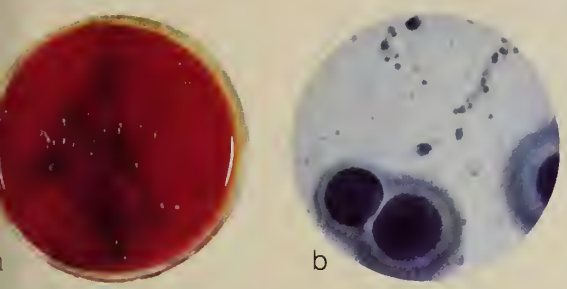
Serologic testing and culture methods for *Mycoplasma pneumoniae* are complex and time consuming, taking as long as two weeks after obtaining samples. The sensitivity and specifici the test for cold agglutinins have been question The complement-fixing antibody test may reflec previous infection. Furthermore, facilities for cul *M. pneumoniae* are not widely available.[3]

If treatment is to be initiated, therefore, it ma necessary to start on the basis of a *presumptive* diagnosis of mycoplasmal pneumonia.[1-3] In rea such a diagnosis, the physician relies on clinica judgment, considering such factors as the age c patient and the history of exposure. For example *Mycoplasma pneumoniae* is considered the mo common cause of pneumonia among ambulato patients aged 20 to 35.[1]



a b

Chest x-rays of patients with (a) pneumococcal pneumonia—classically heavy, extensive infiltration of left lung; (b) mycoplasmal pneumonia—mild infiltrate confined to left lower lobe. Roentgenography usually does not help in differential diagnosis, since both types of pneumonias may present with a wide spectrum of x-ray as well as clinical findir



b

Distinct mucoid colonies of type 3 pneumococci *(Streptococcus eumoniae)* on sheep blood agar showing greenish discoloration pha-hemolysis) of medium. (b) Typical "fried-egg" colonies of *coplasma pneumoniae* consisting of dense central core with hter periphery. Cultural and serologic methods for detecting *pneumoniae* are complex, time-consuming, and not widely ailable.

Expectant therapy

patient with a presumptive diagnosis of plasmal pneumonia or bacterial pneumonia, it be desirable to initiate antibiotic therapy before re and sensitivity results are available.
course of erythromycin or tetracycline is idered effective in the treatment of mycoplasmal monia to help speed the clearing of infiltrate and en the duration of symptoms.[1,3] In pneumococcal monia, erythromycin is an effective alternative to cillin, the drug of choice. A recent report, based ata from 200 hospitals of 100 beds or more, found of *S. pneumoniae* sensitive *in vitro* to romycin.[4]
mong these therapeutic agents, only romycin provides effective coverage of both *plasma pneumoniae* and *S. pneumoniae*. The illins are not effective against *Mycoplasma*, and *eumoniae* has shown a relatively high incidence istance to tetracycline.
/hen erythromycin is selected for therapy, cin (erythromycin enteric-coated tablets, Upjohn) ood choice. E-Mycin is administered and bed as active erythromycin base, and may be q.i.d., q 6h, or b.i.d., immediately after meals or een meals. Thus, patients can use mealtimes to hem remember their medication. The enteric ng on E-Mycin tablets helps ensure efficient ption in the intestinal tract, and bioavailability es show that E-Mycin can be expected to ice predictable, acceptable blood levels. The ost of E-Mycin helps assure economical therapy. -Mycin rarely causes serious side effects and is sociated with liver toxicity.* The most frequent ffects are upper gastrointestinal, such as minal cramping and discomfort, and are dose- d. Nausea, vomiting, and diarrhea occur uently with usual oral doses. Serious allergic ons, including anaphylaxis, have rarely been ed.

iously in patients with severe liver impairment.

NCES: 1. Chusid EL, Dalrymple W, Holloway WJ, et al: Managing the infectious ias. *Patient Care* 9:122-167, 1975. 2. The occasional might of mycoplasma cy *Med* 7:82, 85, 1975. 3. Stevens DA: Viral and Mycoplasma pneumonias. *Med* 55:81-86, 1974. 4. Data source: PMR Bacteriologic Report, Winter Series 1975-1976. Data are a compilation of laboratory reports submitted during December 1975 and January and February 1976 by 200 acute care hospitals of 100 beds or more.

Please turn page for brief summary of prescribing information.

Summary

Because pneumonias may be difficult to differentiate at the outset, treatment is often initiated before a causal diagnosis is made. However, readily available diagnostic criteria occasionally allow early differentiation between bacterial and nonbacterial pneumonias. When the diagnosis appears to be nonbacterial pneumonia, further differentiation between mycoplasmal pneumonia and viral pneumonia is more complex and time-consuming. Therefore, therapy is often initiated on the basis of a *presumptive* diagnosis of mycoplasmal pneumonia.

Erythromycin is an effective antibiotic against *Mycoplasma pneumoniae, Streptococcus pneumoniae,*† and *Streptococcus pyogenes.*† E-Mycin (erythromycin enteric-coated tablets, Upjohn) is administered and well absorbed as the active base, may be taken immediately after meals or between meals, and is essentially nontoxic.

†Although penicillin remains the drug of choice against these organisms, erythromycin is an effective alternative



E-Mycin® 250 mg

erythromycin enteric-coated tablets, Upjohn

wide-ranging usefulness in pneumonia*

*Mild to moderately severe, due to susceptible organisms

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Wide-ranging usefulness in pneumonia*

E-Mycin® 250 mg

erythromycin enteric-coated tablets, Upjohn

Upjohn

- For mild to moderately severe infections due to susceptible organisms that commonly invade the respiratory tract
- Essentially nontoxic (see Precautions and Adverse Reactions below)
- Documented bioavailability
- May be taken immediately after meals or between meals
- Active base formula produces predictable blood levels
- Formulated for quality...priced for economy

E-MYCIN® TABLETS — 250 mg — For Oral Administration (erythromycin enteric-coated tablets, Upjohn)
E-Mycin Tablets are specially coated to protect the contents from the inactivating effects of gastric acidity and to permit efficient absorption when administered either immediately after meals or when given between meals on an empty stomach.

Indications: *Streptococcus pyogenes (group A beta-hemolytic streptococci):* Upper and lower respiratory tract, skin, and soft-tissue infections of mild to moderate severity. Parenteral benzathine penicillin G is considered by the American Heart Association to be the drug of choice in the treatment and prevention of streptococcal pharyngitis and in long-term prophylaxis of rheumatic fever. When oral medication is necessary (because the parenteral route is contraindicated) or if there is known allergy to penicillin, the following recommendations made by the American Heart Association apply: 1) Oral penicillin G or V (where no allergy exists)—This is the drug of choice. Give for a minimum of 10 days; 2) Erythromycin—Give for a minimum of 10 days. A few strains of streptococci resistant to erythromycin have been reported.
Alpha-hemolytic streptococci (viridans group): Short-term prophylaxis against bacterial endocarditis prior to dental or other operative procedures in patients with a history of rheumatic fever or congenital heart disease who are hypersensitive to penicillin. (Erythromycin is not suitable prior to genitourinary surgery where the organisms likely to lead to bacteremia are gram-negative bacilli or the enterococcus group of streptococci.)
Staphylococcus aureus: Acute infections of skin and soft tissue of mild to moderate severity. Resistance may develop during treatment.
Diplococcus pneumoniae: Upper respiratory tract infections (eg, otitis media, pharyngitis) and lower respiratory tract infections (eg, pneumonia) of mild to moderate degree.
Mycoplasma pneumoniae (Eaton agent, PPLO): In the treatment of primary atypical pneumonia, when due to this organism.
Treponema pallidum: Infections due to this organism.
Corynebacterium diphtheriae and *Corynebacterium minutissimum:* As an adjunct to antitoxin, to prevent establishment of carriers, and to eradicate the organism in carriers. In the ment of erythrasma.
Entamoeba histolytica: In the treatment of intestinal am only. Extraenteric amebiasis requires treatment with other a
Listeria monocytogenes: Infections due to this organism.

Contraindication: Contraindicated in patients with known sensitivity to erythromycin.

Warning: Safety for use in pregnancy has not been estab

Precautions: Erythromycin is principally excreted by th Caution should be exercised in administering the antibi patients with impaired hepatic function. Surgical proc should be performed when indicated.

Adverse reactions: The most frequent side effects of e mycin preparations are gastrointestinal, such as abd cramping and discomfort, and are dose-related. Nausea, ing, and diarrhea occur infrequently with usual oral During prolonged or repeated therapy, there is a possib overgrowth of nonsusceptible bacteria or fungi. If such tions occur, the drug should be discontinued and appr therapy instituted. Mild allergic reactions such as urtica other skin rashes have occurred. Serious allergic reactic cluding anaphylaxis, have been reported.

Treatment of overdosage: The drug is virtually nontoxic, some individuals may exhibit gastric intolerance to ever peutic amounts. Allergic reactions associated with acut dosage should be handled in the usual manner—that is, administration of adrenalin, corticosteroids, and antihist as indicated and the prompt elimination of unabsorbe in addition to all needed supportive measures.

How supplied: 250 mg enteric-coated tablets—in bottles of 1 500 tablets, and in unit-dose packages of 100 tablets. C Federal law prohibits dispensing without prescription.

For additional product information, consult the package or see your Upjohn Representative.

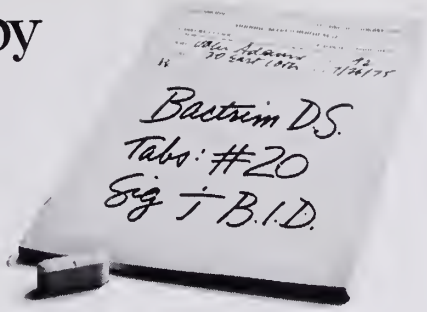
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*Mild to moderately severe, due to susceptible organisms

0-day Bactrim therapy outperforms 10-day ampicillin therapy.



n a multicenter, double-blind study of patients with hronic or frequently recurrent urinary tract infection, actrim 10-day therapy outperformed ampicillin)-day therapy by 27.2%, when comparing patients ho maintained clear cultures for eight weeks. riterion for "clear culture" was 1000 or fewer organms/ml of urine.

While adverse reactions noted in this study were ild (*e.g.*, vomiting, nausea, rash), more serious reacons can occur with these drugs. See manufacturer's oduct information for complete listing. Maintain dequate fluid intake; perform frequent CBC's and inalyses with microscopic examination.

ote: Bactrim tablets were used in these clinical trials. Bioequivency studies show one Bactrim DS double strength tablet is quivalent to two Bactrim tablets.

Bactrim™ DS
(160 mg trimethoprim and 800 mg sulfamethoxazole)
Double Strength tablets
Just 1 tablet B.I.D.

Bactrim™


(80 mg trimethoprim and 400 mg sulfamethoxazole)
2 tablets B.I.D.

For chronic or frequently recurrent cystitis and pyelonephritis due to susceptible organisms.

efore prescribing, please consult complete product information, a mmary of which follows:

dications: Chronic urinary tract infections evidenced by persistent cteriuria (symptomatic or asymptomatic), frequently recurrent infecns (relapse or reinfection), or infections associated with urinary ct complications, such as obstruction. Primarily for cystitis, pyelophritis or pyelitis due to susceptible strains of *E. coli, Klebsiella-nterobacter, Proteus mirabilis, Proteus vulgaris* and *Proteus organii.*

OTE: The increasing frequency of resistant organisms limits the useIness of antibacterials, especially in these urinary tract infections. he recommended quantitative disc susceptibility method (*Federal egister,* 37:20527-20529, 1972) may be used to estimate bacterial sceptibility to Bactrim. A laboratory report of "Susceptible to trimethoprim-sulfamethoxazole" indicates an infection likely to respond Bactrim therapy. If infection is confined to the urine, "Intermedie susceptibility" also indicates a likely response. "Resistant" indites that response is unlikely.

ntraindications: Hypersensitivity to trimethoprim or sulfonamides; egnancy; nursing mothers.

arnings: Deaths from hypersensitivity reactions, agranulocytosis, lastic anemia and other blood dyscrasias have been associated th sulfonamides. Experience with trimethoprim is much more nited but occasional interference with hematopoiesis has been reted as well as an increased incidence of thrombopenia with pura in elderly patients on certain diuretics, primarily thiazides. re throat, fever, pallor, purpura or jaundice may be early signs of rious blood disorders. Frequent CBC's are recommended; therapy ould be discontinued if a significantly reduced count of any formed od element is noted. **Data are insufficient to recommend use in ints and children under 12.**

ecautions: Use cautiously in patients with impaired renal or hepatic nction, possible folate deficiency, severe allergy or bronchial hma. In patients with glucose-6-phosphate dehydrogenase defincy, hemolysis, frequently dose-related, may occur. During ther, maintain adequate fluid intake and perform frequent urinalyses, h careful microscopic examination, and renal function tests, parularly where there is impaired renal function.

verse Reactions: All major reactions to sulfonamides and trimethrim are included, even if not reported with Bactrim. *Blood dysasias:* Agranulocytosis, aplastic anemia, megaloblastic anemia, ombopenia, leukopenia, hemolytic anemia, purpura, hypoproombinemia and methemoglobinemia. *Allergic reactions:* Erythema multiforme, Stevens-Johnson syndrome, generalized skin eruptions, epidermal necrolysis, urticaria, serum sickness, pruritus, exfoliative dermatitis, anaphylactoid reactions, periorbital edema, conjunctival and scleral injection, photosensitization, arthralgia and allergic myocarditis. *Gastrointestinal reactions:* Glossitis, stomatitis, nausea, emesis, abdominal pains, hepatitis, diarrhea and pancreatitis. *CNS reactions:* Headache, peripheral neuritis, mental depression, convulsions, ataxia, hallucinations, tinnitus, vertigo, insomnia, apathy, fatigue, muscle weakness and nervousness. *Miscellaneous reactions:* Drug fever, chills, toxic nephrosis with oliguria and anuria, periarteritis nodosa and L. E. phenomenon. Due to certain chemical similarities to some goitrogens, diuretics (acetazolamide, thiazides) and oral hypoglycemic agents, sulfonamides have caused rare instances of goiter production, diuresis and hypoglycemia in patients; cross-sensitivity with these agents may exist. In rats, long-term therapy with sulfonamides has produced thyroid malignancies.

Dosage: Not recommended for children under 12. Usual adult dosage: 1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) b.i.d. for 10-14 days.

For patients with renal impairment:

Creatinine Clearance (ml/min)	Recommended Dosage Regimen
Above 30	Usual standard regimen
15-30	1 DS tablet (double strength), 2 tablets (single strength) or 4 teasp. (20 ml) every 24 hours
Below 15	Use not recommended

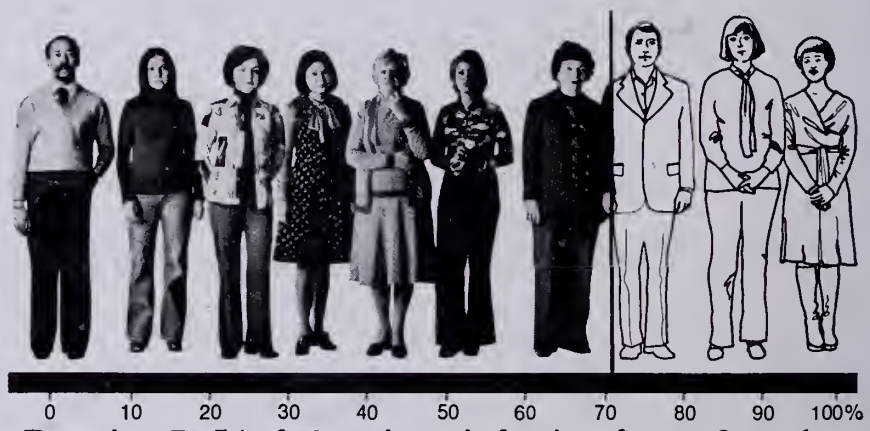
Supplied: Double Strength (DS) tablets, each containing 160 mg trimethoprim and 800 mg sulfamethoxazole, bottles of 100; Tel-E-Dose® packages of 100. Tablets, each containing 80 mg trimethoprim and 400 mg sulfamethoxazole — bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 40, available singly and in trays of 10.

Oral suspension, containing in each teaspoonful (5 ml) the equivalent of 40 mg trimethoprim and 200 mg sulfamethoxazole; fruit-licorice flavored — bottles of 16 oz (1 pint).

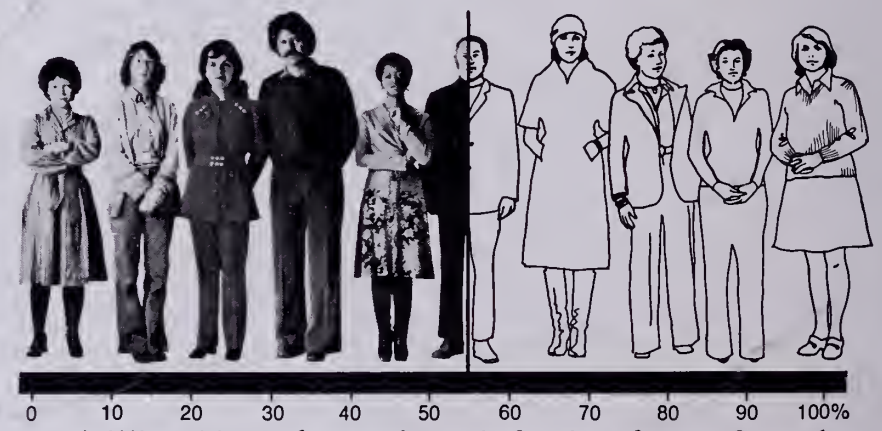
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In a multicenter study of patients with chronic or frequently recurrent urinary tract infection

Bactrim was 27.2%* more effective than ampicillin in keeping patients infection-free for 8 weeks.†



Bactrim–70.5% of 78 patients infection-free at 8 weeks.



ampicillin–55.4% of 74 patients infection-free at 8 weeks.

*This percentage is arrived at by the statistical method of dividing the difference between Bactrim and ampicillin results (15.1%) by the percent of ampicillin results (55.4%).

†Data on file, Hoffmann-La Roche Inc., Nutley, New Jersey 07110

Bactrim™ DS

(160 mg trimethoprim and 800 mg sulfamethoxazole)

Double Strength tablets Just 1 tablet B.I.D.

Note: Bactrim tablets were used in these clinical trials. Bioequivalency studies show one Bactrim DS double strength tablet is equivalent to two Bactrim tablets.

Please see summary of product information on preceding page.

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Season's Greetings

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Both often



Before prescribing, please consult complete product information, a summary of which follows:

Indications: Tension and anxiety states; somatic complaints which are concomitants of emotional factors; psychoneurotic states manifested by tension, anxiety, apprehension, fatigue, depressive symptoms or agitation; symptomatic relief of acute agitation, tremor, delirium tremens and hallucinosis due to acute alcohol withdrawal; adjunctively in skeletal muscle spasm due to reflex spasm to local pathology; spasticity caused by upper motor neuron disorders; athetosis; stiff-man syndrome; convulsive disorders (not for sole therapy).

Contraindicated: Known hypersensitivity to the drug. Children under 6 months of age. Acute narrow angle glaucoma; may be used in patients with open angle glaucoma who are receiving appropriate therapy.

Warnings: Not of value in psychotic patients. Caution against hazardous occupations requiring complete mental alertness. When used adjunctively in convulsive disorders, possibility of increase in frequency and/or severity of grand mal seizures ma require increased dosage of standard ant convulsant medication; abrupt withdraw may be associated with temporary increase in frequency and/or severity of seizures. Advise against simultaneous ingestion of alcohol and other CNS depressants. Withdrawal symptoms (similar to those with barbiturates and alcohol) have occurred following abrupt discontinuanc (convulsions, tremor, abdominal and mu cle cramps, vomiting and sweating). Kee addiction-prone individuals under carefu

respond to one

According to her major symptoms, she is a psychoneurotic patient with severe anxiety. But according to the description she gives of her feelings, part of the problem may sound like depression. This is because her problem, although primarily one of excessive anxiety, is often accompanied by depressive symptomatology. Valium (diazepam) can provide relief for both—as the excessive anxiety is relieved, the depressive symptoms associated with it are also often relieved.

There are other advantages in using Valium for the management of psychoneurotic anxiety with secondary depressive symptoms: the psychotherapeutic effect of Valium is pronounced and rapid. This means that improvement is usually apparent in the patient within a few days rather than in a week or two, although it may take longer in some patients. In addition, Valium (diazepam) is generally well tolerated; as with most CNS-acting agents, caution patients against hazardous occupations requiring complete mental alertness.

Also, because the psychoneurotic patient's symptoms are often intensified at bedtime, Valium can offer an additional benefit. An *h.s.* dose added to the *b.i.d.* or *t.i.d.* treatment regimen can relieve the excessive anxiety and associated depressive symptoms and thus encourage a more restful night's sleep.



Valium® (diazepam) IV

2-mg, 5-mg, 10-mg scored tablets

in psychoneurotic anxiety states with associated depressive symptoms

surveillance because of their predisposition to habituation and dependence.

***Usage in Pregnancy:* Use of minor tranquilizers during first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

Precautions: If combined with other psychotropics or anticonvulsants, consider carefully pharmacology of agents employed; drugs such as phenothiazines, narcotics, barbiturates, MAO inhibitors and other antidepressants may potentiate its action. Usual precautions indicated in patients severely depressed, or with latent depression, or with suicidal tendencies. Observe usual precautions in impaired renal or hepatic function. Limit dosage to smallest effective amount in elderly and debilitated to preclude ataxia or oversedation.

Side Effects: Drowsiness, confusion, diplopia, hypotension, changes in libido, nausea, fatigue, depression, dysarthria, jaundice, skin rash, ataxia, constipation, headache, incontinence, changes in salivation, slurred speech, tremor, vertigo, urinary retention, blurred vision. Paradoxical reactions such as acute hyperexcited states, anxiety, hallucinations, increased muscle spasticity, insomnia, rage, sleep disturbances, stimulation have been reported; should these occur, discontinue drug. Isolated reports of neutropenia, jaundice; periodic blood counts and liver function tests advisable during long-term therapy.

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Merry Christmas
Joyous Tidings
Seasons Greetings
Happy Hanukkah
Yuletide Blessings
Goodwill to All Men

There are many ways to say it but mostly we want to say "Thanks" for making ours very happy!

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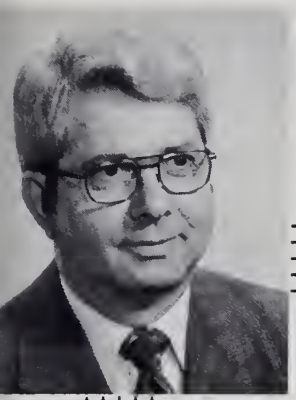
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MESSAGE FROM THE PRESIDENT



Much effort on the part of the KMA Officers, Board of Trustees, and staff has been made in the last few years to inform the KMA membership of the multiple activities of the Association. All of the actions of the House of Delegates are published in the December issue of *The Journal*. In this report are the activities of the various committees of the Association as well as reports of all of the Officers and all of the meetings of the Board of Trustees. Embodied in the report of the Board of Trustees is the action of the Executive Committee of the Board and Quick Action Committee (President, President-Elect, and Board Chairman). There are no secret dealings or "kept informational items."

In addition to the above reports there are frequent mailings to the county society secretaries of current items of interest, some of which ask for county society action and some of which go unanswered and probably unread. There is a monthly *Journal* with scientific articles and news articles. There are usually monthly (or more frequent) mailings of the "Communicator" which calls attention to current work, attitudes, and meetings.

Almost all of the specialty medical journals, the *JAMA*, the weekly *AMA News*, and numerous other publications come into our offices regularly and they contain news of what is going on in organized medicine throughout the country in addition to what we have in our own state publications.

Are you an informed KMA member? If not, is it because you do not read the material that comes to you? I know you cannot read everything that is mentioned above but it is my feeling that there is enough information easily available to everyone of us to make us a more knowledgeable KMA member and better able to inform our Trustees, our Delegates, our Board, and our Officers of our own feelings and our desires regarding activity that is taking place in our organization. Won't you resolve to be better informed this year?

Merry Christmas and Best Wishes for the New Year to all of you.

Paul J. Parks

Auxiliary

A Link in the Chain

Once again AKMA had the opportunity to send representatives from all over our state to Chicago for a National President/President-Elect meeting. Each state is represented and the number of county presidents-elect attending depends upon the state membership. The past two years Kentucky has been allowed five representatives. I cannot stress enough for each county to select a president-elect. You will miss out on a golden opportunity to attend this outstanding meeting.

The seminars were all good but the one presented that each member can participate in was Violence on TV. Presenting the seminar was Ms. Peggy Charren, President, Action for Children's Television (ACT), and Mr. Ted Carpenter, representing National Citizens Committee for Broadcasting.

ACT was formed several years ago due to concern about the suitability of available programming for children. This was before Educational Television. ACT discovered not only is there too much TV violence but children are being utilized commercially. ACT has not been able to stop all advertisements on children's programs but has been instrumental in reducing the number of ads on Saturday and Sunday morning by 40%.

On the positive side, ACT is making commercials about nutritious snacks to counter "junk-food" snacks. They have also started a campaign to educate parents in appropriate ways to respond to violence seen on TV.

The AMA adopted the following resolution at its Annual Convention in Dallas:

Resolved that the House of Delegates of the AMA

1. Declare its recognition of the fact that TV violence is a risk factor threatening the health and welfare of young Americans, indeed our future society.
2. Commit itself to remedial action in concert with industry, government, and other interested parties.
3. Encourage all physicians, their families, and their parents to actively oppose TV programs containing violence, as well as products and/or services sponsoring such programs.

No matter your age, this is a project you can participate in and do something for the future of **all** children. Contact your county president now to learn all the details.

I would like to thank everyone who attended Fall Board, especially Campbell-Kenton for an outstanding job of being hostess!

Catherine Schoo (Mrs. Bernard) presented two motions from the Health Careers Loan Fund Committee: 1) To increase the annual interest rate to be in keeping with present needs; 2) To require the loan recipient to sign a personal note in addition to the contract, hoping to impress upon each one his or her legal responsibility. They were approved by the Board.

Upon inquiry to the KMA Executive Committee we learned that KMA has never furnished a suite for the Auxiliary and often does not have one for its own use. There had been some misunderstanding on this in the past but the Executive Committee reiterated that it had not been the policy but they did start a few years ago furnishing a sleeping room for the Auxiliary President. This will be done again for our Convention next September. The hospitality suite for the Convention just completed was paid for by the Auxiliary per action of the Board.

It should be known that KMA expends considerable finances and effort for the Auxiliary. They allocate some $1600 for operating expenses in addition to approximately $700 for rent. They finance a secretary, Mrs. Diane Schmidt, who works one day each week solely for the Auxiliary. All of our printing is done at KMA Headquarters which would be a substantial cost to the Auxiliary if it had to be done by a printing firm as has been the case in past years. In addition, we have access to all of the KMA staff members and to all of the meeting rooms and other facilities at KMA. The total expense of our telephone is borne by KMA and a "laundry list" of their assistance is unending; indeed, this page in *The Journal* is just another example of the help we receive at no expense.

I would like to take this opportunity to wish all our Jewish members a Happy Hanukkah. To all other members and potential members I wish you a Blessed Christmas and sincere Best Wishes for 1977.

MRS. R. PARNELL ROLLINGS, PRESIDENT
AUXILIARY TO THE KMA

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Griffiths, L.L., Brocklehurst, J C., MacLean, R et al *Diet in Old Age*, Brit. Med J., 1.739, 1966



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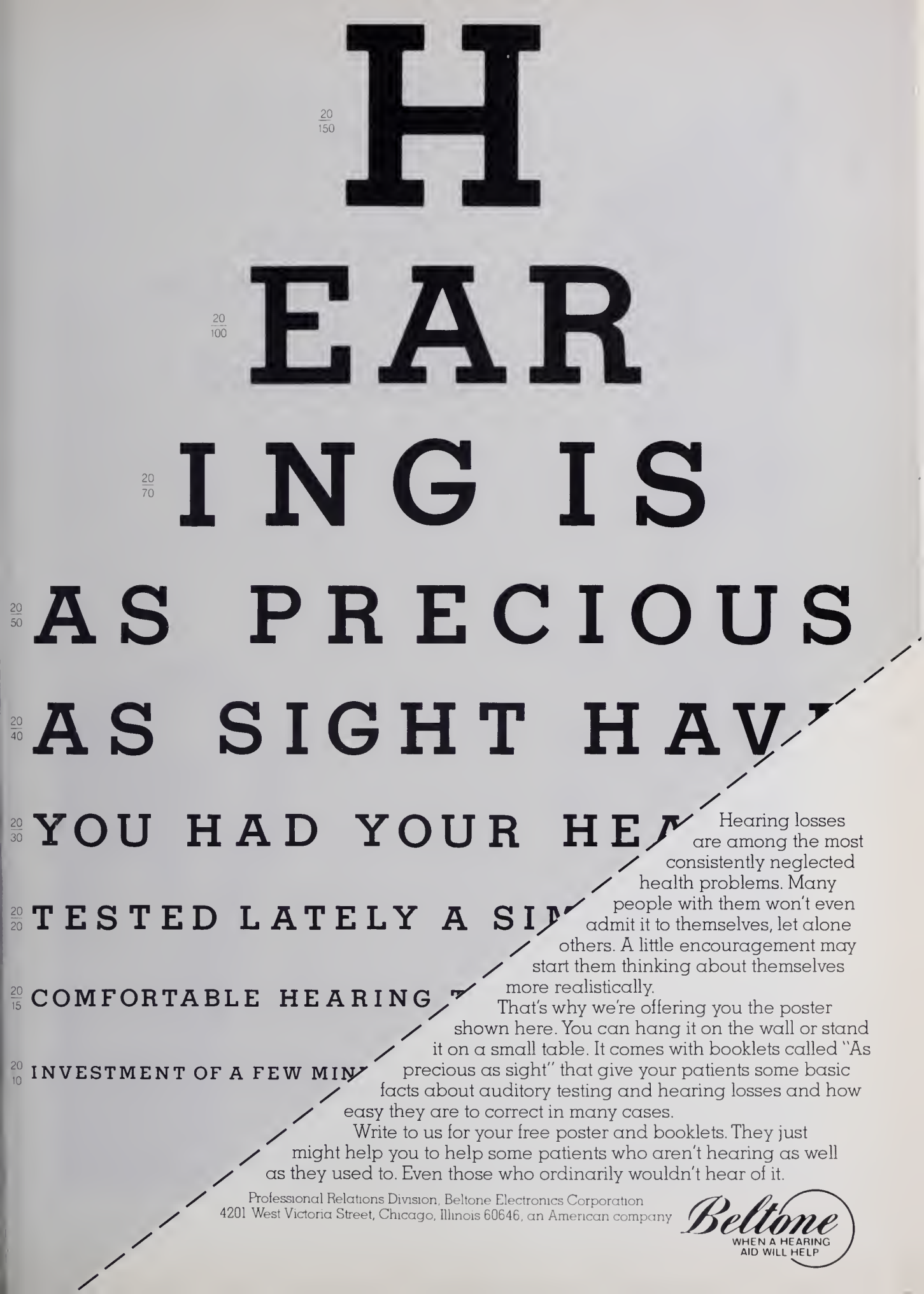
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Epilepsy as a Sequel of Obstetrical Complications

JO ANNE SEXTON, M.D.

Hazard, Kentucky

Eight cases are reported to illustrate the probable correlation between epilepsy and complications of childbirth. It is felt that serious obstetrical complications may be a significant cause of adult onset epilepsy in women.

IT is well recognized by neuro-physiologists that anoxia from any cause, if prolonged or profound, can cause brain damage. The resulting neurological impairment can be manifested by seizures, mental impairment, paresis, and other problems.[1-7] The necessity for prompt treatment of status epilepticus is generally appreciated by medical personnel.

Although the need for adequate prenatal and intrapartum care has been vigorously proclaimed by obstetricians, family physicians, and public health workers, very little has been written in the medical literature concerning neurological sequelae of obstetrical problems.[8]

Recognition of the fact that obstetrical complications can lead to neurological damage to the fetus was the basis for the federally funded Maternal and Infant Care Projects. These projects initially declared as a major aim the reduction of mental retardation. Mental retardation, epilepsy, cerebral palsy, learning problems, behavior disorders, and a host of other "developmental disabilities" are known to result from perinatal complication. Less documented is the fact that obstetrical complications can lead to permanent neurological damage to the mother.

Each year *The Journal of Kentucky Medical Association* reports a few maternal deaths due to eclampsia, hemorrhage, and sepsis.[11] Jewett of the Massachusetts Medical Society recently reported autopsy findings of a 32-year-old woman who died of cerebral edema resulting from eclampsia.[9] Patients who survive eclampsia, intrapartum hemorrhage, and postpartum sepsis are much more numerous than those who succumb to these complications.[10] It is often assumed that mothers who survive from eclampsia and other problems of the puerperium will recover completely. At worst, the literature tends to imply, they may suffer from chronic hypertension or problems of the genito-urinary system. Only a few recent references can be found regarding the neurological complications of eclampsia.[8]

Bergamini and Mutani of the University of Turin (Italy) reviewed the literature regarding neurological complications of eclampsia. They point out that autopsy studies on patients who have died of eclampsia have shown cerebral hemorrhage, arterial spasm, and zones of infarct, among other findings. Patients who recover may have hemiplegia, asphasia, and mental deficiency. Other psychic disturbances may include defects in memory, inappropriate affect, and impairment of fine judgement. Epilepsy as a late complication of eclampsia was not mentioned specifically by this group.

The incidence of chronic epilepsy as a sequel of eclampsia and other obstetrical complications is not known. A survey of the recent literature did not yield reports of neurological follow-up studies done on women who had suffered from these problems. One clinic facility, the Hazard Family

Received at KMA: 6-10-76

Health Services of the Hazard Appalachian Regional Hospital, has handled eight cases of epilepsy which appeared to follow obstetrical complications. This has led us to conclude that the association between epilepsy and eclampsia may be more common than supposed. Obstetrical problems may be a significant cause of adult-onset epilepsy in women.

Although prenatal and intrapartum care is much more accessible to Kentucky mothers than a decade ago, some women still fail to obtain adequate maternity care. There are economic, sociological, and educational reasons for this, such as shortages of medical manpower, meager financial resources of the family, transportation problems, and failure of the mother to realize the importance of this type of health supervision.

As will be illustrated by the eight cases cited below, it is often the "high-risk" mother who fails to obtain adequate obstetrical care. The teenage mother, the grand multipara, the woman in the lower socio-economic level are among this high risk group. Some counties and communities do not yet have an answer for the mother without financial resources or a third party payment plan for maternity care. Many of these women appear at hospital emergency room in labor, without having had prenatal health supervision. This leads to concern that further cases such as the ones described below will continue to occur.

Case #1: E.B. was apparently well until age 15 years at which time she was taken to the hospital in labor with her first child. Her labor lasted for 48 hours. During the last 30 hours of labor she had intermittent convulsions. She gave birth to a living male infant who survived without apparent damage.

Upon discharge from the hospital six days after delivery the patient appeared confused. She was not aware that she had given birth to the baby. She has had seizures once or twice a week from that time despite treatment with dephenylhydantoin and phenobarbital. Although her sensorium has gradually cleared, she has never regained her previous mental alertness or intelligence.

Family history was non-contributory except for a cousin who had seizures following surgical removal of a brain tumor.

Neurological examination showed no focal findings. Patient was mildly clumsy in gait and in performing gross motor activities. EEG showed generalized slowing with 7½-8½ sec. basic rhythm.

Although seizures became less frequent with changes in therapeutic regimen, she continues to have an occasional psychomotor seizure twelve years after illness with eclampsia. She appears to be mildly mentally retarded. Her mother confirms that E.B. has been "different" since delivery of her child. She must have help in managing her household.

Case #2: N.N. enjoyed good health with no seizures nor other neurological problems until onset of labor with her first child. She was 19 years old at that time. She felt well during pregnancy, but had no prenatal care. She was in labor at home with an untrained midwife in attendance when the patient began to have convulsions. She appeared to relatives to be dying and was rushed to a nearby hospital where the infant was delivered and the patient's seizures were controlled. The baby died at age eight days.

The patient was confused for the next three months. Her sensorium gradually cleared. However, her husband reports that she has remained quite changed from the alert, vivacious young woman whom he married. She appears apathetic and mildly intellectually impaired. Twenty-five years later N.N. continues to have a generalized tonic clonic convulsion every three to six months despite medication.

Her family history showed that a cousin has seizures. Neurological examination showed recent memory impairment, probably mild mental deficiency, and mild spastic diplegia. EEG showed mild generalized slowing.

Case #3: E.G. gave birth to a premature infant who died at age five days. The patient was then in apparent good health until two years later, age 22, when she gave birth to her second child, an infant which weighed 9 lb 8 oz. A few hours after delivery the patient had a hemorrhage. She was rushed from the small local hospital to a medical center two and a half hours away. She arrived unconscious and in shock. She has no memory of the events which transpired over the next few days, but was told that she received 27 pints of blood, and that an emergency hysterectomy had been done. She lost weight from her non-pregnant weight of 100 lbs to 74 lbs.

Fifteen years after the episode of obstetrical shock the patient began to have psychomotor seizures which are controlled by medication. Although the patient's weight remains at 75 to 80 lbs, laboratory studies do not reveal other

evidence of Simmonds' disease. Neurological examination was non-revealing. EEG showed bitemporal slowing, with depression of activity in the left temporal area.

Case #4: G.W., who became pregnant out of wedlock, had onset of labor at age 15. When convulsions began she was taken to a hospital, and an emergency cesarean section was done. The infant survived, but has cerebral palsy which confines him to a wheelchair.

The patient "didn't know anything" for several weeks after the birth of the child. She has had impairment of memory since the episode of eclampsia.

Eight to ten years after the cesarean delivery the patient had onset of psychomotor seizures. The seizures have occurred several times a month despite anticonvulsant medication.

Neurological examination was non-revealing. EEG showed a focal spike discharge in the left temporal region.

Case #5: E.E. was well until the time of her first pregnancy at age 22. She had abdominal pain which persisted for several days. Finally, the diagnosis of ruptured tubal pregnancy was made, and surgery was performed. Patient developed shock due to sepsis, and was unconscious for several days.

Within a year of the above surgery, the patient began to have psychomotor seizures. The seizures responded to anticonvulsant drugs. The patient is of good intelligence and is neurologically intact aside from the epilepsy and leads an active life. However, seizures still occur 30 years after the surgery whenever the patient forgets to take her medication.

Case #6: L.H. was thought to be well until age 42 years when she had onset of labor with her tenth child. She had had little medical care with any of her pregnancies.

During this tenth labor the patient went into deep shock, and uterine rupture was diagnosed. At cesarean section a still-born infant in transverse lie was noted. An emergency hysterectomy was done.

The patient was out of contact with her surroundings for two days after delivery. Within a few days of the hemorrhage she began to have convulsions. Twenty-five years later she has a brief focal seizure every month or two despite medication.

L.H.'s chronic epilepsy has altered the family structure in that she has had to have assistance with household chores and supervision lest she be injured during an attack. She once fell onto a stove during a seizure, sustaining a burn to her forearm which required skin grafting.

Neurological examination was within the normal range for a 67-year-old woman. EEG showed some bi-parietal slow (3-4/s) activity with sharp wave discharge in the parietal or central areas.

Case #7: B.H. had had chronic otitis media and mastoiditis since childhood. When she was 26 years old, she had an acute illness which was thought to be focal meningitis. A mastoidectomy was done. She apparently made a complete recovery from this illness.

At age 40 the patient was pregnant for the tenth time. During labor she began to have convulsions. Twins were delivered, one of whom died. After delivery the patient felt weak and ill for many days. In fact, she has never felt quite well since this delivery. She has had one or two generalized convulsions per month since that illness 10 years ago. Recent medication changes have brought about improved seizure control. However, the patient appears forgetful and unclear as to details. She does not keep her clinic appointments faithfully. An EEG has not yet been done.

Case #8: P.M. is now 54 years old. She came from a low income family. Due to the fact that her mother was ill with heart disease, the patient stayed at home to do the chores and never attended school. Her mother died when she was about 12 years old.

P.M. married when she was 13 years old. At age 15 she went into labor at home with her first child. During labor she developed convulsions and was thought to be moribund. A still-born infant was delivered.

Since that time the patient has had an occasional generalized convulsion. She appears to be mildly retarded, and to think in a "concrete" manner. Some memory loss is evident. It is not thought that she adheres to her anticonvulsant regimen.

Several other cases have been reported to the author, but have not been seen personally.

Summary

Eight cases are reported in order to illustrate the probable correlation between epilepsy and serious complications of childbirth. None of the

eight patients had seizures nor other known evidence of neurological impairment prior to the obstetrical anoxic episode (convulsions, hemorrhagic shock, shock secondary to sepsis). None of the eight had other history of neurological insult except for Case #7, B.H. Only one patient, Case #2, has known family history of epilepsy.

Several maternal deaths occur in Kentucky each year due to eclampsia, sepsis, and hemorrhagic shock. It is not known how many women survive these complications, but a much larger number survive than succumb to these obstetrical problems.

It is felt that serious obstetrical complications may be a significant case of adult onset epilepsy in women. Inasmuch as some of these complications are largely preventable, the data presented serve to further emphasize the importance of adequate prenatal and perinatal care.

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Manuscript Memos

Manuscripts should be submitted in duplicate to The Journal of KMA, an original copy and one carbon, and typed with double spacing. Maximum length of an article should not exceed 4500 words; the Board of Consultants on Scientific Articles prefers that they be briefer than this when possible.

In submitting a manuscript, the author is requested to include a c... ...se summary, not to exceed 35 words, to be used as a sub-title when the article is published in The Journal. The purpose of the summary is to create additional interest and encourage greater readership.

Footnotes and bibliographies should conform to the style of the Quarterly Cumulative Index Medicus published by the American Medical Association. This requires in the order given name of author, title of article, name of periodical, with volume, page, month—day of month if weekly—and year. The Journal of the KMA does not assume responsibility for the accuracy of references used with scientific articles.

All scientific material appearing in The Journal is reviewed by the Board of Consultants on Scientific Articles. The editors may use up to six illustrations with the essayist bearing the cost of all over three one-column halftones.

Arrangements for reprints of an article should be made directly with the publisher of The Journal, Gibbs-Inman Printing Company, 817 W. Market St., Louisville, Ky.

The bylaws of the Kentucky Medical Association provide that all scientific discussions and papers read before the KMA Annual Meeting shall be referred to the KMA Journal for consideration for publication. The bylaws further state that the editor or the associate editor may accept or reject these papers as it appears advisable and return them to the author if not considered suitable for publication.

Please mail your scientific articles to The Journal of the Kentucky Medical Association, 3532 Ephriam McDowell Drive, Louisville, Kentucky 40205.



Glaucoma: A Cause of Needless Blindness†

John G. Bellows, M.D.*

An estimated 8 million Americans suffer from glaucoma—the second leading cause of blindness today —and two to three million of them don't even know they have the disease. Glaucoma, in its most common form, usually exists without giving its victims any warning symptoms. Undetected, the disease causes irreversible optic nerve damage eventually leading to total blindness. The tragedy of glaucoma blindness is that it frequently can be averted by early detection and proper management. The eradication of blindness caused by glaucoma is the goal of a new organization of ophthalmologists prominent in glaucoma research. The INTERNATIONAL GLAUCOMA CONGRESS has been formed as a positive step toward reducing the incidence of glaucoma blindness by making the newest information on the diagnosis and treatment of glaucoma available to all physicians. Through the sponsorship of Lederle Laboratories, the Congress will hold its first meeting in February 1977, in Hollywood, Florida.

The importance of early diagnosis cannot be overemphasized. If glaucoma is detected early, damage to the optic nerve, and therefore to the patient's eyesight, will be minimal. Though vision already destroyed at the time of diagnosis can never be restored, appropriate treatment will prevent further damage in the vast majority of patients.

Glaucoma is a recognized health problem all over the world. No one race shows a higher incidence of the disease, but control is noticeably harder to achieve in patients with heavily pigmented eyes, such as blacks and Mediterranean peoples. Glaucoma is frequently a genetic disease and, thus, individuals with relatives who have glaucoma should undergo yearly thorough examinations performed by a highly qualified medical eye specialist. Though glaucoma is more common in those past 40 years of age, it can occur in people of all ages, including newborn infants. Diabetics are more prone to the condition than the general population.

Chronic simple glaucoma—by far the most common form—may be present without the victim's being aware that he has the disease. In many instances the visual field may become gradually constricted, up to the point where the patient has only "tunnel vision." Eventually, total blindness will ensue. Only the rare acute form of glaucoma (angle-closure glaucoma) causes sudden visual impairment and severe pain. If the intraocular pressure is very high, and immediate skilled medical help is not available, blindness may occur within 24 hours.

Ophthalmologists often see patients who state that they have been changing their glasses at regular intervals for a year or more, on the recommendation of a nonmedical eye specialist, and yet their sight continues to diminish. When examined by an ophthalmologist, these patients often learn to their dismay that glaucoma has been causing their difficulties. Frequent changes in the glasses prescription have merely delayed detection of the high intraocular pressures that have been causing the diminishing vision. Such patients have needlessly lost part of their sight—a loss which can never be restored. The word "needlessly" is used advisedly, because if glaucoma is detected early and treated properly, blindness can be prevented.

The early detection of glaucoma requires painstaking and time-consuming tests. Skilled ophthalmologists performing perimetric tests may frequently find blind spots (scotomata) near the visual center. While these scotomata are characteristic of early glaucoma, their detection in the early stages of the disease is difficult and requires painstaking testing performed by a skilled ophthalmologist or well-trained assistant. Because elevated fluid pressure in the eye itself is the most obvious symptom of glaucoma, the first important diagnostic procedure is **tonometry**—measurement of the intraocular pressure using a simple, gauge-like device called a tonometer. Unfortunately, because intraocular pressure varies both diurnally and seasonally, one tonometric measurement is not reliable. For this reason, glaucoma-suspect patients should have repeated tonometric tests. Although there are exceptions, the highest pressures are usually recorded between 4 and 6 a.m., and lowest readings are obtained at noon. Readings are generally higher in the winter than in the summer.

In some instances, it is desirable to hospitalize the patient and measure the intraocular pressure at hourly intervals over a 24-hour period. When these measurements are plotted, they form the so-called diurnal curve which indicates the time of day at which an individual's intraocular pressure peaks. It is during the peak periods that the eye sustains its major damage.

Another essential diagnostic procedure is **tonography** —a test that measures the facility of aqueous humor outflow. High intraocular pressures may be caused by blockages in the normal outflow channels. Invariably, these high pressures result in optic nerve damage. There are various explanations of the mechanism by which

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**Professor of Ophthalmology, University of Health Sciences, Chicago Medical School, Chicago*

increased intraocular pressure causes damage to the optic nerve.

Visual field tests reveal the loss of peripheral vision and whether the degree of constriction has increased. Careful perimetric studies should be performed by a qualified ophthalmologist or a very well-trained assistant and, to be meaningful, should be repeated at least every six months to determine whether the constriction is progressing or whether the glaucomatous process is under control.

Finally, the **optic disc ratio** should be measured during every office visit. Increases in the optic nerve disc ratios denote the occurrence of further optic nerve damage. Only in recent years have ophthalmologists become aware of the importance of recording the disc ratios frequently in order to follow the course of the disease. Asymmetry of disc ratios is a highly reliable sign of glaucoma.

Immediate and long-term control of mild forms of chronic simple glaucoma can usually be achieved merely with the proper miotic drops (intraocular pressure-reducing agents). If miotic therapy is insufficient, the addition of the systemic administration of an anhydrous carbonic inhibitor will frequently control the disease. As soon as the intraocular pressure is normalized, glaucoma damage stops. To recapitulate, early diagnosis and treatment are essential to the prevention of glaucoma blindness.

"Anti-Substitution" Drug Law Enacted by the 1976 Kentucky General Assembly

During the last session of the Kentucky General Assembly, House Bill 194 was enacted. This Bill, which will amend KRS Chapter 217, has been termed the "anti-substitution" or Generic Drug Law. Although the Law directly affects all physicians and pharmacists, very little information has been made generally available about its provisions.

Under the Law, pharmacists must dispense the lowest priced generic drug which is "therapeutically equivalent to the one prescribed" by the physician. A sign to this effect must be posted in the pharmacy where it can be easily seen.

When a patient presents a pharmacist with a prescription, the pharmacist must fill it with the lowest priced generic drug **in stock** and must list on the label the name of the drug prescribed and the name of the drug actually dispensed.

The physician may indicate on the prescription blank that he does not wish any substitutes to be made, but words to this effect cannot be pre-printed. The patient can also request that the drug not be substituted but the pharmacist must dispense the lowest priced "generic equivalent" drug if no "anti-substitution" request is made.

If the pharmacist receives a prescription for a brand name drug for which one or more "equivalent" drugs are listed by the Drug Formulary Council, he must use the lowest priced therapeutically equivalent drug in stock.

Because there has been some question of the exact manner that a physician should mark a prescription to prevent substitution, and to clarify the pharmacist's responsibility, the Attorney General is being asked to render an opinion. Hopefully, the physician will be able to simply mark the prescription in some abbreviated hand written form. The Attorney General is expected to give an opinion within a few months. In the interim, physicians are urged to write "do not substitute" on any prescriptions for their patients and are also urged to ask their patients to demand that prescriptions not be substituted.

This and similar legislation, in past sessions of the Legislature have been opposed by KMA, because bioequivalence and bioavailability have not been substantially shown, such laws interfere with the physician's ability to treat his patients, and no real cost savings to patients have been projected.



MATERNAL MORTALITY



This 24-year-old, married, black, gravida 1, para 0, was initially seen at a military clinic for amenorrhea with suspected pregnancy. She was markedly obese, weighing over 400 lbs. She had a history of vague abdominal pain and had a previous gall bladder study that was poorly visualized due to her obesity. Blood pressure on August 2, 1974, was 180/120. On October 6, it was 120/76. On January 23, 1975, she had a positive pregnancy test. She received a letter of non-availability and was followed by a private physician.

She had signs of preeclampsia and was hospitalized. She weighed 430 pounds on admission and 419 when discharged.

She complained of some low back pain in the evening on July 2. On July 3, at 2:41 a.m., she was brought to the emergency room DOA. Just before her demise, she complained of shortness of breath and had been coughing. Her husband attempted to get her into his automobile; however, she stopped breathing. He called an ambulance. Vomitus was present in her mouth and on her face.

An autopsy showed the cause of death to be asphyxia and pulmonary edema. She had recently eaten and was in the supine position. The great weight of her anterior abdominal wall forced regurgitation of some stomach contents which she aspirated. Her efforts at coughing were greatly hendered by her obesity and her pregnancy. This aggravated the laryngospasm induced by the food in her larynx which then became more prominent, resulting in her death.

Her "massive" obesity was undoubtedly a strong factor in her death. Her husband could not move her to a hospital for assistance.

Comments

The Maternal Mortality Committee classified this as an obstetric death with preventable factors. Obesity is truly the enemy of the obstetrician. There is a direct linear relationship between maternal and fetal morbidity and the degree of obesity present. In the primagravida the "grotesquely obese" patients have "prolonged labor", which is associated with increased intrapartum death and perinatal mortality. The "massively obese" patients have statistically increased incidence of unusually large infants and abnormal presentations of infants are doubled. Toxemia occurs in 62%. Pyelonephritis is increased five times and diabetes mellitus is increased ten times. Generally, obstetric complications occur in 62% and operative obstetrics occurs in 35% of these obese patients.

Treatment of these "massively obese" patients includes a weekly prenatal visit and the start of a toxemia regimen early in their gestation. Gestational diabetics should be suspected in each patient. Because of their high risk ratio some measures of fetal well being should be done (estriols and human placental lactogen). Once in labor, the fetus should be closely monitored. Guidelines for progress in labor should be established. Disproportion should be anticipated. If fetal distress or failure of progress of labor develops, cesarean section should be done promptly. Procrastination prior to cesarean section jeopardizes the mother and fetus alike. Post-operative complications, such as thrombophlebitis, pulmonary embolism, atelectasis, pneumonia, wound infections, and dehiscences, are common. However, the optimum time for cesarean section should not be passed because of a fear of these complications.

This patient was also admitted with a diagnosis of preeclampsia. By definition a blood pressure of 180/120 is severe preeclampsia. No severe preeclamptic should be discharged from the hospital until she is delivered. If the mother's condition is not critical, evaluation of the pregnancy with urinary estriols and oxytocin challenge test should be done. The decision to deliver is based on the severity of the disease versus fetal maturity. In the past, treatment has always been "conservative," —i.e., sedation and hypotensive therapy. The definitive treatment has always been to empty the uterus.

Recently studies have shown that there is little to gain and much to lose by delaying active obstetric intervention. As the disease progresses, it becomes more difficult to control. There may be a cumulative effect of the drugs on the fetus. Unless the estriol and oxytocin challenge test are normal, there is very little to be gained for the fetus in severe preeclampsia—even when the fetus is obviously premature (30-34 weeks).

To reduce perinatal mortality it is necessary to stabilize the mother's condition quickly and to effect delivery within 12 hours of initiating treatment. In severe preeclampsia, the longer the fetus remains "in utero" the greater the perinatal loss.

When stimulating the preeclamptic patient in labor with oxytocin it is important to monitor the fetal heart closely. If there is a definite increase in the type 2 deceleration, it is probably due to the utero-placental insufficiency that already exists. It may be wise to start labor with a pitocin infusion, but once labor begins, then discontinue the pitocin and allow labor to progress naturally.

We can note that:

1. Toxemia of pregnancy is avoidable in most instances.
2. Early, adequate, antenatal care and proper nutrition will frequently prevent toxemia.
3. **Prompt** vigorous treatment of preeclampssia will limit eclampsia, and reduce perinatal mortality.

Therefore, it is important that each hospital that does obstetrics (no matter how few deliveries), have a protocol of management that is safe and easily followed by staff members who are infrequently faced with this problem.

EDITORIAL

December, 1976

THE other day, in browsing through the library, I happened upon past volumes of the *Kentucky Medical Association Journal.* With more than casual interest in the editorial pages, I concentrated on past December issues. Not always was the Editor's page for December devoted to an end-of-the-year thank you; rather, it was business as usual.

Not too many years ago the editorial theme of the December *Journal* became one of "year-end thanks." As part of this theme, a list of the physicians in Kentucky who died during the year was published, always with at least the implied gratitude of a medical profession and patients whom they served. In addition, expressions of thanks on the part of the Editorial Board to those people who supported *The Journal* were made. In keeping with the tradition, we would like to again thank all those persons whose talents and support in 1976 permitted the existence of this *Journal.* Especially do our thanks go to the *Journal* staff, the scientific contributors, the advertisers, and the administration of the Society and, once again, our thanks to Doctor Walter Hume who served *The Journal* so faithfully as its Editor in recent years.

GRS

PSALM 38:5-14

"Let me know, O Lord, my end and what is the number of my days, that I may learn how frail I am. A short span you have made my days, and my life is as nought before you; only a breath is any human existence. A phantom only, man goes his ways; like vapor only are his restless pursuits; he heaps up stores, and knows not who will use them.

And now, for what do I wait, O Lord? In you is my hope. From all my sins deliver me; a fool's taunt let me not suffer.

I was speechless and opened not my mouth, because it was your doing; take away your scourge from me; at the blow of your hand I wasted away. With rebukes for guilt you chasten man; you dissolve like a cobweb all that is dear to him; only a breath is any man. Hear my prayer, O Lord; to my cry give ear; to my weeping be not deaf! For I am but a wayfarer before you, a pilgrim like all my fathers. Turn your gaze from me, that I may find respite ere I depart and be no more."

Deceased Kentucky Physicians

1976

W. Burr Atkinson, Campbellsville

Louis Baer, Louisville

Kenneth L. Barnes, Princeton

Claud Miller Bays, Lexington

Marie Elsie Biehl, Louisville

John Tobin Boldrick, California

*Wible Stewart Carter, Louisville

H. H. Cherry, Bowling Green

W. Parker Clifton, Barbourville

Randell Dow Collins, Whitesburg

Paul Miller Crawford, Florida

E. R. Earl, Nicholasville

*William Procter Eubank, Louisville

M. Charles Glasgow, Paducah

John Edward Herget, Covington

*Albert Stoddard Irving, Louisville

Benjamin B. Jackson, Louisville

William Harrison Jones, Gray

Herbert P. Knodt, Paintsville

Margaret A. Limper, Louisville

Adolph Bernhardt Loveman, Louisville

Henry A. Maxwell, Louisville

John K. McBain, Louisville

Charles Miles McKinlay, Lexington

Kareem Minhas, Louisville

Roy H. Moore, Sr., Louisville

Roy H. Moore, III, Louisville

William N. Offutt, III, Lexington

*James Vernon Pace, Paducah

James C. Preston, Pikeville

*Frank E. Reeder, Paducah

Josephine A. W. Richardson, Louisville

Harper Eugene Richey, Louisville

George O. Roth, Louisville

Edward I. Rustin, Pikeville

Charles L. Tuttle, Murray

Vernard Franklin Voss, Louisville

Warren E. Wheeler, Lexington

List of names of deceased physicians available to The Journal as of November 19, 1976.

**Died October-November, 1975*

FROM THE EDITOR'S NOTEBOOK

Notes of medical and professional interest from a cross-section of America's journals.

Arthritis, Steroids, and History

In the October, 1976 issue of the *Mayo Clinic Proceedings* (51:655-659) there is a worthwhile article about the uses and abuses of intrasynovial injection of steroid drugs. This brief and lucid article by Robert H. Fitzgerald, Jr., M.D., outlines the indications and contraindications of such injections, emphasizes the need for aseptic technique, and discusses the preparations used. The controversial mechanisms of action are interesting and the complications are listed in some detail. Fitzgerald cites one study suggesting a strong placebo effect of intra-articular injection of steroids in patients with osteoarthritis and ends his abstract summary thusly: "Repetitive injections appear to be contraindicated as they may create an environment conducive to joint destruction."

The August issue of the *Mayo Clinic Proceedings* commemorated the 50th anniversary of the founding of the Division of Rheumatology at the Mayo Clinic in 1926 and it has been noted that this Division of Rheumatology was the first training program in rheumatology in this country. Doctor Phillip S. Hench was the first division Chairman and there have been two succeeding Chairmen—Doctor Charles H. Slocumb, in 1952, and Doctor Howard F. Polley, in 1962. The latter two distinguished scientists have the lead article in the Symposium on Rheumatology entitled "Behind the Scenes with Cortisone and ACTH." In this they describe vividly the events during the original clinical investigation of cortisone (Compound E) and adrenocorticotropic hormone (ACTH) in patients with rheumatoid arthritis and related disorders in 1948 and 1949. Medical history buffs and rheumatologists should not miss this classic.

Say Something in Medicalese, Sam!

I belong to a club that is devoted to the study of the history of medicine. Each member of the group takes a turn giving a paper relevant to medical history at our meetings held monthly during the academic year. With Walter Mitty fervor and dreams of great glory I decided that at my next turn I would give the most erudite, intriguing, interesting, and spellbinding paper ever on the origin and development of our medical terminology and language. I began collecting material and was certain the local library computers would furnish additional information. I was complacently smug and confident I had a real winner!

The real winner came, but it was the product of John H. Dirckx, M.D., Medical Director, Student Health Center at the University of Dayton in Ohio. It is a little paperback book of 170 pages published by Harper and Row and worth much more than the $4.95 it costs. The title is appropriately "The Language of Medicine" and the subtitle: "Its Evolution, Structure and Dynamics," tells of the contents. The book is almost everything the titles say it is and luckily the first 13 pages on history of plain English is an outstanding section of the whole. There is good humor here if you are willing to laugh at what you as a physician have been doing for years—what you have said and heard and written.

There are serious sections on our classical language heritage, references to literature and mythology and not so serious sections on modern coinages, medicalese, nursese, and verbosity. The bibliography is brief but produces a desire to read on and on. The index of words and phrases is helpfully complete. It is overall a good little book. Try it, you'll like it. I did!

Changes Coming In January Journal

ORGANIZATION SECTION

Members Reverse House Action On Unified Membership

A majority vote of the membership reversed action taken by the 1976 House of Delegates in regard to unified membership. As of November 30, 1,801 votes were cast in favor of maintaining the current wording in the Bylaws to make membership in the American Medical Association *voluntary*. The majority vote number was in excess of 51% of the current active KMA membership in accordance with Article X of the KMA Constitution and Bylaws. The number of votes in opposition totaled 393.

Licensure Board Postpones Mandatory CME

The Kentucky State Board of Medical Licensure has agreed to "hold in abeyance" the proposed continuing medical education requirements for further study.

At its meeting on November 18, the Board decided to furnish all physicians in the state with information regarding the proposed CME program. At a later date, hearings will be scheduled around the state by the Board for input from local physicians. The hearings will be followed by a statewide poll concerning continuing medical education as related to re-registration of a license to practice medicine.

KEMPAC Officers Elected At Nov. 10 Meeting

Donald C. Barton, M.D., Corbin was re-elected Chairman of the Board of Directors of KEMPAC. Doctor Barton, a family physician, was elected to the one-year term at the Board's Annual Meeting held November 10 in Louisville.

Newly elected as Vice-Chairman was Lee C. Hess, M.D., Florence. Doctor Hess is a Past President of the Kentucky Medical Association and is also a family physician.

Re-elected as Secretary was Bennett L. Crowder, II, M.D., Hopkinsville, and as Treasurer, Carl Cooper, Jr., M.D., Bedford. Mrs. George W. Schafer, Louisville, was elected Assistant Treasurer, succeeding Donald R. Neel, M.D., Owensboro.

Mrs. Tom Hall, Bowling Green, President-Elect of the Auxiliary to KMA, replaces Mrs. William Richardson, Cadiz, as a Member-At-Large of the Board.

Serving on the Board from the seven Congressional Districts are: 1st—Doctor Crowder and Wally Montgomery, M.D., Paducah; 2nd—Doctor Neel and Thomas R. Taylor, M.D., Elizabethtown; 3rd—Sam A. Overstreet, M.D., Louisville; 4th—Doctor Cooper and Doctor Hess; 5th—Doctor Barton and Robert McLeod, M.D., Somerset; 6th—John P. Broderson, M.D., Frankfort, and John E. Trevey, M.D., Lexington; 7th—Harvey A. Page, M.D., Pikeville.

In addition to Mrs. Hall, Mrs. Ballard Cassady of Pikeville, Mrs. Schafer, and Mrs. John P. Stewart of Frankfort, serve as Members-At-Large.

DES Pamphlet Available

The National Cancer Institute is making available to all physicians a pamphlet entitled, "Information for Physicians—DES Exposure in Utero," which was compiled by the Institute's Division of Cancer Control and Rehabilitation. This pamphlet, as well as two others, "Questions and Answers About DES Exposure Before Birth," and "Were YOU or YOUR DAUGHTER Born After 1940?," is available at no cost from the National Cancer Institute's Office of Cancer Communications, Bethesda, Maryland 20014.



The University of Louisville School of Medicine class of 1926 are pictured at their 50th reunion held during the KMA Annual Meeting in Louisville. (Top, left to right) Doctors: Sam Simpson, Malcolm Riddell, Otho Hudson, Dean Arthur Keeney, Sam Black, and Armand Fischer. (Bottom, left to right) Doctors: John Harper, Frank Picklesimer, Wayne Cox, Charles Stacy, and Lansing Keeler.



A 1931 graduate of the University of Louisville, Keiji Uchikura, M.D., of Osaka, Japan, presents a Japanese painting to Dean Arthur H. Keeney during the alumni reunion of the class of 1931. W. Ray Moore, M.D., Louisville, assisted in the presentation.

Hemophilia Society Honors Two Kentucky Physicians

The National Hemophilia Society presented awards to U.S. Representative Tim Lee Carter, M.D., Tompkinsville, and William H. Matthew, M.D., Whitesburg, at the annual meeting of the Society held recently in Chicago.

Doctor Carter received the Kuhn Award for Distinguished Service for his role in the passage of legislation that created 17 hemophilia comprehensive care and treatment centers across the nation.

The 1976 Outstanding Leadership Award was presented to Doctor Matthew, medical director of the Eastern Kentucky Hemophilia Chapter. Doctor Matthew was active in getting legislation passed during the 1976 Kentucky General Assembly that provides financial assistance for hemophiliacs.

Journal Takes New Look

A new format is coming in the January issue of *The Journal of the Kentucky Medical Association*. Look for changes in the cover and an expanded organization section.

The editorial board feels the upcoming changes will be a benefit to the membership of KMA as more emphasis will be placed on news of the Association and its effect upon you, the practicing physician.

Postgraduate Opportunities

IN KENTUCKY

DECEMBER

15 "Central Nervous System Infections,"** Health Sciences Center, Louisville

17-18 "Gastrointestinal Workshop for the Practicing Physician,"* University of Kentucky Medical Center, Lexington

JANUARY

5 "Evaluation of the Multiple Injury Patient,"** Health Sciences Center, Louisville

19 "Health Care for Adolescents,"** Health Sciences Center, Louisville

26 "Suicide,"** Louisville Area CME Consortium, Health Sciences Center, Louisville

FEBRUARY

2 "The Immune System: General Introduction and Functional Evaluation,"** PCP Series, Health Sciences Center, Louisville

9-11 "Clinical Relevance of Recent Advances in Internal Medicine," sponsored by American College of Physicians and University of Kentucky College of Medicine (21 1/2 hours, Category I credit), Lexington

11-12 Third International Symposium on Psychopharmacology, Department of Psychiatry, University of Louisville School of Medicine, Louisville

16 "Differential Diagnosis of Dysphagia,"** PCP Series, Health Sciences Center, Louisville

23 "Adult Respiratory Distress Syndrome," Louisville Area CME Consortium, Health Sciences Center, Louisville

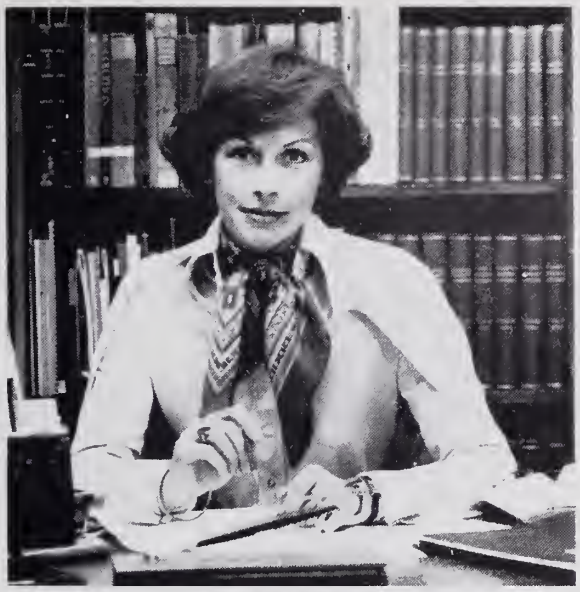
25-26 Breast Cancer Management Symposium and Workshop, University of Louisville School of Medicine, Stouffer's Inn, Louisville

IN SURROUNDING STATES

JANUARY

28-30 AMA Congress on Medical Education, Palmer House, Chicago

**For further information, contact: Frank R. Lemon, M.D., Associate Dean for Continuing Education, University of Kentucky College of Medicine, Lexington 40506*
***For further information contact: Gerald D. Swim, Executive Director, Office of Continuing Education, University of Louisville School of Medicine, Louisville 40202*



She's a graduate of Columbia with a Masters in literature.

She's a vice president of a publishing company.

She's watched television programs and read dozens of pamphlets and articles about early cancer detection.

She has relatives and close, personal friends who have had mastectomies.

She's about as aware of the need for breast self-examination as any intelligent woman could be.

Yet she does not get regular checkups nor does she even examine her own breasts.

Why? Because her doctor never told her to.

But 92% of the women who receive personal instruction from their doctors *do* regularly practice BSE.*
You don't have to be told how important early detection is. But maybe you need this reminder that a few personal words from you can often mean more than the millions of words that go into publicity and television programs.

*Based on a Gallup study conducted for the American Cancer Society.



Photo: Ray Solowinski

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ANUSOL-HC® CREAM
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CAUTION: Federal law prohibits dispensing Anusol-HC Suppositories and Anusol-HC Cream without prescription.

Description: Each Anusol-HC Suppository contains hydrocortisone acetate, 10.0 mg; bismuth subgallate, 2.25%; bismuth resorcin compound, 1.75%; benzyl benzoate, 1.2%; Peruvian Balsam, 1.8%; zinc oxide, 11.0%; also contains the following inactive ingredients: bismuth subiodide, calcium phosphate, and coloring in a bland hydrogenated oil-cocoa butter base.

Each gram of Anusol-HC Cream contains hydrocortisone acetate, 5.0 mg; bismuth subgallate, 22.5 mg; bismuth resorcin compound, 17.5 mg; benzyl benzoate, 12.0 mg; Peruvian Balsam, 18.0 mg; zinc oxide, 110.0 mg; also contains the following inactive ingredients: propylene glycol, bismuth subiodide, propylparaben, methylparaben, polysorbate 60, sorbitan monostearate in a water-miscible base of mineral oil and glyceryl monostearate. Non-staining.

Indications: Anusol-HC is adjunctive therapy for the symptomatic relief of pain and discomfort in: external and internal hemorrhoids, proctitis, papillitis, cryptitis and fissures, incomplete fistulas, and relief of local pain following anorectal surgery.

Anusol-HC is especially indicated when inflammation is present. When acute symptoms subside, most patients can be maintained on regular Anusol® Suppositories or Ointment.

Contraindications: History of sensitivity to any component. Topical corticosteroids should not be employed in tuberculous, fungal and most viral lesions of the skin (including herpes, vaccinia and varicella).

Warnings: The safe use of topical steroids during pregnancy has not been fully established. Therefore, during pregnancy they should not be used unnecessarily on extended areas, in large amounts or for prolonged periods of time.

Precautions: Symptomatic relief should not delay definitive diagnoses or treatment. When there is bacterial skin infection, topical corticosteroids should be used only with appropriate concomitant antimicrobial therapy. Prolonged or excessive use of corticosteroids might produce systemic effects.

Dosage and Administration: Anusol-HC Suppositories: Remove foil wrapper and insert into the anus. One suppository in the morning and one at bedtime, for 3 to 6 days or until inflammation subsides. Then maintain patient comfort with regular Anusol.

Anusol-HC Cream: Adults—Remove tube cap and attach the plastic applicator. After gentle bathing and drying of the area, apply to the exterior surface and gently rub in. For internal use, insert the applicator by applying gentle, continuous pressure. Then squeeze tube to deliver medication. Cream should be applied 3 or 4 times a day for 3 to 6 days or until inflammation subsides. Then maintain patient comfort with regular Anusol.

Supplied: Anusol-HC Suppositories—boxes of 12 (N 0047-0089-12) suppositories in silver foil strips with (W|C) printed in black.

Anusol-HC Cream—one-ounce tube (N 0047-0090-01) with plastic applicator; detachable label.

Full information is available on request.

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- without CNS stimulants

Artist's interpretation in bas-relief of external hemorrhoids, postoperative anorectal wounds and anal dermatitis.

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NEOSPORIN® Ointment
(polymyxin B-bacitracin-neomycin)
is a famous fighter, too.

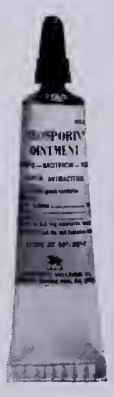
Provides overlapping, broad-spectrum antibacterial action to help combat infection caused by common susceptible pathogens (including staph and strep).

Each gram contains: Aerosporin® brand Polymyxin B Sulfate 5,000 units; zinc bacitracin 400 units; neomycin sulfate 5 mg (equivalent to 3.5 mg neomycin base); special white petrolatum qs in tubes of 1 oz and 1/2 oz and 1/32 oz (approx.) foil packets.

INDICATIONS: Therapeutically (as an adjunct to systemic therapy when indicated) for topical infections, primary or secondary, due to susceptible organisms, as in: • infected burns, skin grafts, surgical incisions, otitis externa • primary pyodermas (impetigo, ecthyma, sycosis vulgaris, paronychia) • secondarily infected dermatoses (eczema, herpes, and seborrheic dermatitis) • traumatic lesions, inflamed or suppurating as a result of bacterial infection.

Prophylactically, the ointment may be used to prevent bacterial contamination in burns, skin grafts, incisions, and other clean lesions. For abrasions, minor cuts and wounds accidentally incurred, its use may prevent the development of infection and permit wound healing. **CONTRAINDICATIONS:** Not for use in the eyes or external ear canal if the eardrum is perforated. This product is contraindicated in those individuals who have shown hypersensitivity to any of the components. **WARNING:** Because of the potential hazard of nephrotoxicity and ototoxicity due to neomycin, care should be exercised when using this product in treating extensive burns, trophic ulceration and other extensive conditions where absorption of neomycin is possible. In burns where more than 20 percent of the body surface is affected, especially if the patient has impaired renal function or is receiving other aminoglycoside antibiotics concurrently, not more than one application a day is recommended. **PRECAUTIONS:** As with other antibacterial preparations, prolonged use may result in overgrowth of nonsusceptible organisms, including fungi. Appropriate measures should be taken if this occurs. **ADVERSE REACTIONS:** Neomycin is a not uncommon cutaneous sensitizer. Articles in the current literature indicate an increase in the prevalence of persons allergic to neomycin. Ototoxicity and nephrotoxicity have been reported (see Warning section).

Complete literature available on request from Professional Services Dept. PML.



Wellcome

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The John A. Lewis Memorial Meeting of The Kentucky Medical Association

Ramada Inn, Bluegrass Convention Center, Louisville, Kentucky, September 28-30, 1976

Digest* of Proceedings of the Regular Sessions of the

House of Delegates

Carl Cooper, Jr., M.D., Bedford
Speaker of the House, Presiding

First Session

Speaker Cooper called the 126th Meeting of the KMA House of Delegates to order at 9:10 a.m. and asked Paul J. Parks, M.D., Bowling Green, to give the invocation. He then called on Bernard O. Rand, M.D., Louisville, Chairman of the Credentials Committee to give the report of the Credentials Committee. Doctor Rand reported that a quorum was present. A motion was made, seconded, and passed that the Minutes of the 1975 session of the House of Delegates be approved as published in the December, 1975, *Journal of the Kentucky Medical Association.*

S. Randolph Scheen, M.D., Louisville, KMA Secretary-Treasurer, gave several announcements. He noted that every member of the House, as well as officers, trustees, and committee members of KMA, were covered by a $50,000 accident insurance policy upon leaving their residence to perform official duties for the Association. He announced the scientific sessions would begin at 8:50 a.m., Tuesday, in the Convention Center; and stressed that the highlight of the Annual Meeting, the President's Luncheon, would take place in the Convention Center on Wednesday at 11:50 a.m. The Secretary-Treasurer reminded the Delegates that the Nominating Committee for general offices would meet at the close of the first session of the House, and Reference Committees would convene at 2 p.m., Monday, in various rooms of the Convention Center.

He reported that the Board of Trustees, in its meeting the day previous, had voted to open the Reference Committee meetings to the press for this year only. He stated the Message Center would again be in operation throughout the Annual Meeting, and emphasized the importance of visiting the technical and scientific exhibits.

Doctor Scheen read a list of member physicians who had died since the 1975 meeting of the House of Delegates, following which the members of the House stood for a moment of silent tribute. The names of the physicians, their locations, and dates of deaths are as follows:

Allen, Will Hogue	Louisville	September 26, 1975
Atkinson, W. Burr	Campbellsville	September 8, 1976
Bays, Claud Miller	Lexington	September 9, 1976
Biehl, Marie Elsie	Louisville	August 4, 1976
Boldrick, John Tobin	Santa Cruz, Calif.	1976
Carter, Wible Stewart	Louisville	November 29, 1975
Cherry H. H.	Bowling Green	September 22, 1976
Clifton, W. Parker	Barbourville	April 12, 1976
Collins, Randell Dow	Whitesburg	May 8, 1976
Eubank, William Procter	Louisville	December 10, 1975
Glasgow, M. Charles	Paducah	April 7, 1976
Hall, Russell Lowell	Amba	October 24, 1975
Herget, John Edward	Covington	April, 1976
Irving, Albert Stoddard	Louisville	November 12, 1975
Jackson, Benjamin	Louisville	January 7, 1976
Jones, William Harrison	Gray	February 23, 1976
Knodt, Herbert P.	Paintsville	January, 1976
Limper, Margaret A.	Louisville	June 15, 1976
Loveman, Adolph Bernhardt	Louisville	April 21, 1976
Maxwell, Henry A.	Louisville	January 6, 1976
McAuliffe, George Francis	Louisville	November 1, 1975
McBain, John K.	Louisville	April 19, 1976
McKinlay, Charles Miles	Lexington	March 23, 1976
Minhas, Kareem	Louisville	May 22, 1976
Moore, Roy H. Sr.	Louisville	April 6, 1976
Moore, Roy H. III	Louisville	September 7, 1976
Offutt, William M., III	Lexington	July 8, 1976
Pace, James Vernon	Paducah	December 22, 1975
Parker, William H.	Owensboro	1975
Preston, James C.	Pikeville	1976
Reeder, Frank E.	Paducah	December 23, 1975
Richey, Harper Eugene	Louisville	January, 1976
Roth, George O.	Louisville	July 21, 1976
Russell, Richard H.	Louisville	September, 1975
Rustin, Edward I.	Pikeville	1976
Strull, Herman Bernard	Louisville	October 11, 1975
Turner, James H.	Hopkinsville	1975
Tuttle, Charles L.	Murray	September 22, 1976
Voss, Vernard Franklin	Louisville	January 6, 1976
Williams, Samuel Earl	Lexington	August 23, 1975

Doctor Cooper announced the Reference Committee appointments as follows:

Reference Committee No. 1

Don E. Cloys, M.D., Richmond, Chairman
Franklin K. Belhasen, M.D., Paintsville
Kenneth M. Eblen, M.D., Henderson
Arthur H. Keeney, M.D., Louisville
John E. Trevey, M.D., Lexington

**Editorial Note: A tape recording was made of the two sessions of the House of Delegates, and any member who desires to examine the transcript of these proceedings may visit the Headquarters Office and listen to the recording.*

Reference Committee No. 2

Harold D. Haller, M.D., Louisville, Chairman
Colby N. Cowherd, M.D., Lexington
W. Bruce Hamilton, M.D., Shepherdsville
Wally O. Montgomery, M.D., Paducah
Don R. Stephens, M.D., Cynthiana

Reference Committee No. 3

Harvey A. Page, M.D., Pikeville, Chairman
James A. Baumgarten, M.D., Owensboro
Richard K. Jelsma, M.D., Louisville
Robert L. McKenney, M.D., Falmouth
John M. Stoeckinger, M.D., Lexington

Reference Committee No. 4

James P. Moss, M.D., Louisville, Chairman
Richard D. Floyd, M.D., Lexington
William E. Pearson, M.D., Owensboro
Fred A. Stine, M.D., Covington
N. H. Talley, M.D., Princeton

Reference Committee No. 5

Robert E. Smith, M.D., Covington, Chairman
Peter C. Campbell, Jr., M.D., Louisville
Henry F. Chambers, M.D., Campbellsville
C. Douglas LeNeave, M.D., Mayfield
R. D. Pitman, M.D., Williamsburg

Reference Committee No. 6

C. Nicholas Kavanaugh, M.D., Lexington, Chairman
Cecil D. Martin, M.D., Carrollton
Wyatt Norvell, M.D., New Castle
C. Ray Potts, M.D., Louisville
L. Martin Wilson, M.D., Bowling Green

Doctor Cooper announced that the tellers for both sessions would be Glenn U. Dorroh, M.D., Lexington, Chairman; Gus A. Bynum, M.D., Georgetown; and Larry J. Hall, M.D., Elizabethtown.

The reports of the officers and committees were presented by the Speaker and referred to a Reference Committee as follows: (Only the reports of the officers were read.)

Report of the President was referred to Reference Committee No. 1 with the following exception: The entire section numbered Topic VIII—Malpractice, was referred to Reference Committee No. 3.

Report of the President, Auxiliary to KMA—Reference Committee No. 1

Report of the President-Elect—Reference Committee No. 1

Report of the Speaker of the House—Reference Committee No. 1

Report of the Chairman, Board of Trustees—Reference Committee No. 1, with the exception of those sections pertaining to liability insurance which were referred to Reference Committee No. 3.

Report of the Secretary-Treasurer—Reference Committee No. 1

Report of the Editor—Reference Committee No. 1

Report of the Delegates to AMA—Reference Committee No. 1

Report of the Executive Director—Reference Committee No. 1

At 10:20 a.m., the Kentucky State Association of Medical Assistants served coffee and sweet rolls to the members of the House in the lobby of Ramada Inn.

Following the short break, the Speaker announced that each of the presidents of the American Medical Student Association Chapters in Kentucky was present to give an oral report to the House. Mr. John M. Riley, President of the University of Louisville AMSA Chapter, and Mr. Larry H. Kagan, President of the University of Kentucky AMSA Chapter, presented their reports.

David A. Hull, M.D., KMA President, presented the 1976 Faculty Scientific Achievement Awards to the University of Kentucky recipient, John J. Hutton, M.D., and the University of Louisville recipient, Nancy C. Flowers, M.D.

Doctor Cooper then introduced the Chairman of the AMA Board of Trustees, Raymond T. Holden, M.D. of Washington, D. C., who proceeded to the podium to address the House.

Following Doctor Holden's statements, the Speaker continued with the referral of reports to the Reference Committees.

Report of the Judicial Council—Reference Committee No. 6

Report of the Rural Kentucky Medical Scholarship Fund—Reference Committee No. 6

Report of the Board of Directors, Kentucky Physicians Mutual, Inc.—Reference Committee No. 4

Report of the Scientific Program Committee—Reference Committee No. 2

Report of the Scientific Exhibits Committee—Reference Committee No. 2

Report of the Continuing Medical Education Committee—Reference Committee No. 2

Report of the Cancer Committee—Reference Committee No. 2

Report of the Maternal Mortality Study Committee—Reference Committee No. 3

Report of the Hospital Committee—Reference Committee No. 2—with the exception of that section pertaining to the cost awareness plan, which is referred to Reference Committee No. 4

Report of the Advisory Committee to Blue Cross-Blue Shield—Reference Committee No. 4

Report of the Committee on Business Management and Services—Reference Committee No. 5

Report of the Committee on Occupational Health—Reference Committee No. 3

Report of the Committee on Long-Term Health Care—Reference Committee No. 5

Report of the Physician-Attorney Liaison Committee—Reference Committee No. 6

Report of the KMA-Kentucky Nurses Association Joint Practice Committee—Reference Committee No. 6

Report of the Claims and Utilization Review Committee—Reference Committee No. 4

Report of the Committee on National Legislative Activities—Reference Committee No. 3

Report of the Committee on State Legislative Activities—Reference Committee No. 3

Report of the Committee on Medicare and Other Governmental Medical Programs—Reference Committee No. 5

Report of the Technical Advisory Committee on Physician Services (Title XIX)—Reference Committee No. 5

Report of the Advisory Committee to the KMA Auxiliary—Reference Committee No. 1

Report of the Advisory Committee to Selective Service —Reference Committee No. 5

Report of the Committee on Community, Rural, and Health Care of the Poor—Reference Committee No. 4

Report of the Committee on Environmental Quality —Reference Committee No. 3

Report of the Committee on School Health, Physical Education, and Medical Aspects of Sports—Reference Committee No. 4

Report of the Committee on Public Relations—Reference Committee No. 5

Report of the Health Manpower and Placement Services Committee—Reference Committee No. 4

Report of the Emergency Medical Care Committee—Reference Committee No. 2

Report of the Interspecialty Council—Reference Committee No. 2

Report of the Committee on Physicians' Health—Reference Committee No. 3

Report of the Committee to Study the Constitution and Bylaws—Reference Committee No. 6

Report of the McDowell House Board of Managers—Reference Committee No. 6

Report of the KMA Advisory Committee on KPRO—Reference Committee No. 4

Report of the Maternal and Child Health Committee —Doctor Cooper stated that although this report had been assigned a number, it would not be before the House for consideration, but because of the nature of its appointment, would be considered by the Board of Trustees.

New Business

New business was presented to the House by the Vice Speaker and referred to the Reference Committee indicated:

(A) Resolution from Garrard County Medical Society concerning Medicaid-Medicare—Reference Committee No. 5

(B) Resolution from Garrard County Medical Society concerning Survey of Physicians—Reference Committee No. 5

(C) Resolution from Garrard County Medical Society concerning Dual Fee for Same Service—Reference Committee No. 5

(D) Resolution from Laurel County Medical Society concerning Medicaid-Medicare—Reference Committee No. 5

(E) Resolution from Campbell-Kenton County Medical Society concerning Unified Membership—Reference Committee No. 6

(F) Resolution from Campbell-Kenton County Medical Society concerning Patient Grievance Review Committee—Reference Committee No. 5

(G) Resolution from Campbell-Kenton County Medical Society concerning Possible Death of Critically or Terminally Ill Patients—Reference Committee No. 6

(H) Resolution from First District Peer Review Committee concerning Peer Review—Reference Committee No. 4

(I) Resolution from Pennyrile Medical Association concerning Medicare Reimbursement Mechanism—Reference Committee No. 5

(J) Resolution from Pennyrile Medical Association concerning Opposition to Continuing Medical Education tied to Licensure—Reference Committee No. 2

(K) Resolution from Jefferson County Medical Society concerning Re-Apportionment of KMA Board of Trustees —Reference Committee No. 6

(L) Resolution from Jefferson County Medical Society concerning Mandatory Continuing Medical Education Tied to Licensure—Reference Committee No. 2

(M) Resolution from Jefferson County Medical Society concerning KMA Election by Total Membership— Reference Committee No. 6

(N) Resolution from Jefferson County Medical Society concerning Amendment to Article X—Referendum— Reference Committee No. 6

(O) Resolution from Jefferson County Medical Society concerning Advisory Committee of County Society Presidents—Reference Committee No. 1

(P) Resolution from Jefferson County Medical Society concerning Optometric Involvement in Medical Care— Reference Committee No. 3

(Q) Resolution from Jefferson County Medical Society concerning Commendation for Mr. J. Ed McConnell— A motion was made, seconded, and carried to accept this Resolution.

(R) Resolution from Jefferson County Medical Society concerning Unrealistic Narcotics Regulations—Reference Committee No. 3

(S) Resolution from KMA Board of Trustees concerning KMA Addressing Service—Reference Committee No. 1

(T) Resolution from Clark County Medical Society concerning Mandatory Continuing Medical Education as Endorsed by the Kentucky Medical Association—Reference Committee No. 2

(U) Resolution from Clark County Medical Society concerning The Double Standard of the Kentucky Medical Association in Relation to PSRO—Reference Committee No. 4

(V) Resolution from Pennyrile Medical Association concerning Composition of the House of Delegates of KMA Ex-Officio Members—Reference Committee No. 6

(W) Resolution from KMA Board of Trustees concerning Kentucky Medical Insurance Association—Reference Committee No. 3

(X) Resolution from L. C. Hess, M.D., Boone County Delegate, concerning Physicians' Assistants—Reference Committee No. 3

Vice-Speaker Crowder announced the meeting places for the Nominating Committee for general officers and the trustee districts electing trustees and alternates. He stated that the Nominating Committee would report at the close of the first scientific session on Tuesday morning, as well as at the second meeting of the House on Wednesday evening. The physicians on the Nominating Committee were named as follows: Leslie W. Blakey, M.D., Lexington, Chairman; Max P. Jones, M.D., Pikeville; William E. Pearson, M.D., Owensboro; Lewis E. Wesley, M.D., Liberty; and J. Sankey Williams, M.D., Nicholasville.

The meeting was adjourned at 11:45 a.m.

Second Session

Speaker Cooper called the second session of the House of Delegates to order at 7:15 p.m. on September 29, 1976. The invocation was given by Harold L. Bushey, M.D., Barbourville. Doctor Rand reported a quorum was present.

Doctor Stewart was then recognized as Chairman of the Board to present the final report of the Board. He read the following Resolution which was passed by the Board at its September 29 meeting, and moved its adoption. The motion was seconded and carried.

WHEREAS, the 1976 KMA Annual Meeting has made a substantial contribution in the field of continuing medical education and has been well received, and

WHEREAS, many individuals, organizations, and agencies, including guests, state essayists, scientific and technical exhibitors, newspapers, radio and television stations, the Ramada Inn and the Bluegrass Convention Center have contributed to its success, therefore be it

RESOLVED, that this House of Delegates go on record of expressing its deepest appreciation to all individuals and organizations who have had a part in the development and implementation of the 1976 Annual Meeting.

Doctor Scheen was then called to the podium for announcements and recognition of guests from neighboring state medical associations who had attended KMA's Annual Session. Included were John J. Mahood, M.D., President of the West Virginia State Medical Association and John W. Beeler, M.D., President-Elect of the Indiana State Medical Association.

Doctor Hull then read a Resolution commending Walter I. Hume, Jr., M.D., of Louisville for his many years of dedicated service as the Editor of *The KMA Journal,* and presented him with bound copies of *The Journal* representing the years he served in this capacity.

Mr. Carl L. Wedekind, Jr., KMA's legal counsel, was called to the podium to inform the House of Delegates of plans KMA has undertaken to investigate the formation of its own captive insurance company. He briefly reviewed the contents of a pamphlet entitled, "Kentucky Medical Insurance Association," which outlined some of the plans underway, and asked the Delegates to answer a short questionnaire printed in the pamphlet indicating their interest in a KMA-owned insurance company.

Following Mr. Wedekind's presentation, the reports of the Reference Committee Chairmen were presented.

REFERENCE COMMITTEE NO. 1*

Don E. Cloys, M.D., Richmond, Chairman

Reference Committee No. 1 considered the following reports and resolutions:

1. Report of the President, with the following exception: The entire section numbered Topic VIII—Malpractice, beginning with the middle of Page 1.8 and ending at the middle of Page 1.10
2. Report of the President, Auxiliary to KMA
3. Report of the President-Elect
4. Report of the Speaker of the House
5. Report of the Chairman, Board of Trustees, with the following exceptions:

   Pages 5.2-5.3, beginning with the third full paragraph, pertaining to liability insurance, on Page 5.2, through the second full paragraph on Page 5.3.

   Pages 5.7-5.8, beginning with the seventh full paragraph, pertaining to liability insurance, on Page 5.7, through the fourth paragraph on Page 5.8.

   Page 5.9, the fourth full paragraph, pertaining to liability insurance.
6. Report of the Secretary-Treasurer
7. Report of the Editor
8. Report of the Delegates to AMA
9. Report of the Executive Director
30. Report of the Advisory Committee to the KMA Auxiliary

Resolution O—Advisory Committee of County Society Presidents (Jefferson County Medical Society)

Resolution S—KMA Addressing Service (KMA Board of Trustees)

**In order to make the Digest of Proceedings of the second meeting of the House of Delegates more understandable and because it will occupy less space in The Journal, the KMA Board of Trustees passed the following motion several years ago: "that if no dissenting action on the Committee's recommendations is made either by the Committee or the KMA Board of Trustees, only the Reference Committee action on the report be printed in The Journal."*

Report of the President

This will be my final report to you as President of the Kentucky Medical Association. It has been my honor and privilege to have served you throughout the past year. My involvement in organized medicine goes back ten plus years, and I have attempted to render a service to my chosen profession through the Kentucky Medical Association. As I ascended the ladder of responsibility during these years, I found myself in many positions which were at times at variance with some of you. This variance, however, was always initiated by the deep concern I had for my profession during those most difficult times, and my entire service to organized medicine has been an effort to improve my chosen field of medicine. I am now ready to give this responsibility to others and hope that in some way the deeds that I have performed will make it easier for physicians of Kentucky to practice a better brand of medicine for their State.

It is very difficult to single out the activities of the past organizational year from those that have preceded it because I know that you are aware that my involvement has been ongoing. I do, however, take pride in three major fields of accomplishments. First is Continuing Mandatory Education formulated by the Kentucky Foundation for Medical Care and passed by the 1974 House of Delegates. This, in my opinion, was a significant step for organized medicine to voluntarily take in the State. Secondly was the ever-emotional Professional Standards Review Organization law about which we have heard so much in recent months. I am proud of the accomplishments of the Kentucky Medical Association in this field in spite of the many detractors and the verbal abuse that many of us have received. Thirdly, I look with pride upon our accomplishments in the field of malpractice legislation, again a controversial but significant step forward, in my opinion. These are but the main areas which may be viewed in retrospect as major accomplishments. There were, however, many others, some equally as important to many of you.

Topic I—KMA Staff

The KMA staff has undergone changes throughout the past year which have reached to the very depth of Ephraim McDowell Drive. Bob Cox, in his able leadership, has had a trying time, and I only wish that each of you could see and appreciate how much personal effort, anxiety, frustration, and time is devoted on your behalf—the physicians of Kentucky—by this man. Bob has received honors and serves in numerous capacities on a National level through his efforts as a medical executive and, perhaps, while he is appreciated at home, his talents are recognized even more away from home than in his own house. This is often the case in most professions and businesses.

Two young men, who, in my opinion, represent ideals of American manhood in business, are exemplified by Bill Applegate and Bob Klinglesmith. Each of these men work untiring hours and have, within themselves, expertise far exceeding the average. You should feel grateful in having them on your payroll. Jerry Mahoney has left the Kentucky Medical Association for the field of political lobbying, but a report on the staff would not be complete without a word about this man. His efforts in the halls of Frankfort were a wonder to behold, and Senate Bills 248 and 249 are just examples of his lobbying efforts. We will miss him at KMA. Bill Schmidt continues to serve you well in the Department of Medical Licensure, and I am sure that since malpractice insurance and continuing medical education are now mandatory, you will be hearing his name more frequently. We welcome Joe Witherington to KMA and look forward to his help. Lillie Byrd's chores of keeping our financial records intact and her expertise in maintaining tight reins on our finances are obvious. To the many other employees who worked untiring hours, I can only say thank you. Certainly a word of gratitude to our legal counsel, Carl Wedekind, is in order as he was called upon almost daily and at inconvenient hours. Finally, I would like to pay tribute to the spouses of the staff and thank them for their understanding.

Topic II—Woman's Auxiliary

Under the able leadership of Gerry Montgomery of Paducah, the Auxiliary members have worked beautifully and done a superb job on behalf of their physician husbands. They have represented you ably at the National level, have been a great help in the lobbying efforts, and are to be commended for their participation in the AMA-ERF Fund. We continue to be extremely appreciative of their efforts.

Topic III—Officers

A. *Office of the President:* The office of the President of the KMA is assuming a more and more significant role. This is truly a working job, and I don't know how a person who is not willing or able to give a significant amount of time would be able to fulfill this office. I, for one, have spent 76 days out of the office on your behalf this year, away from my practice, and can certainly say that the mere physical problems that this presents are significant. In addition, I think it is well to mention at this time that the office of the President of the Kentucky Medical Association should be appreciated by more of our members; appreciated by each, realizing that the President is speaking for all physicians of the State and not for just a few; that he is speaking, not for self-aggrandizement, but for all the members of the profession; and that he is speaking for the Board of Trustees, the officers of the Association, and House of Delegates. At many points during the past year the frustrations of this office were immense. The criticism leveled by the press, the public, the Legislators, and even one's fellow physicians, has been a disturbing element. Personal, professional, and even financial pressures have made the office at times undesirable. I think it is well for us to realize, as we convene here, that the actions of the House of Delegates will be voiced by the President for the next year, and each of you should remember your actions when he speaks them.

B. *Board of Trustees:* The Board of Trustees, as you all know, is the official governing body of the Association between sessions of the House of Delegates. During the time that I have been actively involved in KMA activities, the Board of Trustees has gone through many phases. Concern is expressed over what appears to be a trend of disinterest, a trend toward allowing the officers and the Executive Committee to carry out too

many of the routine duties, and an inability of each Trustee to keep informed as to the major medical issues of our day. It would seem to be wise to have the Board of Trustees meet on a much more frequent basis, and I would strongly urge future Boards to meet every other month, even if it is only for information purposes rather than decision making. In addition, I would have the Executive Committee meet alternate months with the Board.

Finally, it is imperative that the Board of Trustees somehow become aware of the American Medical Association's House of Delegates activities prior to the semi-annual AMA meetings. I would suggest that the Delegates and Alternate Delegates to AMA, therefore, meet with the full Board as soon as feasible prior to the Annual AMA Convention and Clinical Meeting and that the Board of Trustees become knowledgeable as to what the Delegates and Alternate Delegates are doing at a National level. The Board, in this manner, could make its wishes known to the delegation on specific matters brought up at the National meeting and both parties would benefit. This might be cumbersome because of time limitations, but an effort should be made.

C. *Delegates—AMA:* As you know, we are losing Delegates and Alternate Delegates, and I would like to take this time to express my personal appreciation to Doctor Tom Giannini, Senior Delegate, who is resigning as of this year. Doctor Giannini's service has been long and arduous, and he has gained the respect of physicians throughout the Country, as well as our own.

Doctor Charles Bryant, also a fixture at the AMA level, is resigning his position. We are deeply appreciative of the many hours and thoughtful consideration that Charlie has brought to us in his service at the National level as Alternate Delegate. Finally, Doctor Tom Heavern is leaving the position of Alternate Delegate. I personally would like for you to know how much I appreciate his efforts on behalf of the physicians of Kentucky for the past number of years as Alternate Delegate. Tom Heavern has brought honor and respect to the Kentucky delegation, and he will be sorely missed.

Before leaving the subject of our AMA delegation, I would encourage the House to consider having the Alternate Delegates become voting members of the Board of Trustees. It seems to me that since they are in attendance at Board meetings, they should have the privilege of full membership as much as anyone who is in regular Board meeting attendance. Their wisdom and expertise would be of great value.

Topic IV—Political Action

A. *Legislation:* The legislative efforts during the past year have been primarily on a State level and receiving a large part of our efforts has been medical liability legislation, which culminated in passage of Senate Bills 248 and 249. The State legislative affairs have been under the able leadership of your Speaker of the House, Doctor Carl Cooper, to whom we all owe a great debt of appreciation for his efforts. As outlined in his report, our stand was successful on 53 of 59 bills—thought to be significant to the Association—for a winning record of 89 percent. I think this speaks well for the efforts of the Legislative Committee.

This year was the first time in many years that we did not hold a Washington Dinner but rather officers and staff carried out this contact for you. I think there is wisdom in having a Congressional Dinner and would encourage this to be done, but not on a routine basis. When asked their preference, the Kentucky Delegation in Washington appeared to be split as to the effectiveness of this approach. We heard some Congressmen and Senators express preference for the Washington Dinner approach, while others preferred briefings, strictly on a business basis. It appears that if we are to be active in Frankfort at the time of the General Assembly every other year, it might be wise to suggest that the Washington Dinner be in the "off years" when the General Assembly is not in session. I would leave this, however, to the discretion of the future Board of Trustees.

Your President's personal involvement on the political scene during the past year appeared to pay dividends in the passage of our legislative program in Frankfort, for it was extremely helpful to have your officers known in Frankfort. Politics is distasteful to many of you, but it seems it is imperative to continue our involvement. I would encourage future personal involvement by officers, Trustees and, yes, each of YOU individually, in the political arena. Being a believer in the two-party system, I feel we must have strong physician involvement in both parties. It also has been advocated that KMA have more input in Frankfort between sessions, and to this end the legal firm of Hazelrigg and Cox has been employed. Hopefully, this firm will be of value to us also during the 1978 General Assembly.

B. *KEMPAC:* There has been a change in the political atmosphere which has and will necessitate changes in the PAC movement. This change has been the Federal Election Law, which, in effect, states that all contributions are of public record, and there have been instances in the past year where KEMPAC contributions were more harmful than helpful. KEMPAC has two purposes: (1) to obtain money for political purposes of organized medicine, and (2) to utilize this money in an effective way so it will be of value to the aims of organized medicine.

In view of this development, it is recommended that KEMPAC form an ad hoc committee, composed of physicians of high political stature, to investigate and recommend the appropriate manner that KEMPAC funds are to be expended.

Topic V—National Health Insurance

It doesn't take a political wizard, a crystal ball, or a communication satellite orbiting the earth to know the political climate is demanding some form of National Health Insurance. This is quite evident when one talks to Legislators in Washington and Frankfort and when one talks to those people outside one's office. A large section of the population seems to feel that health care is a God-given right. Whether we agree with this philosophy or not, some form seems inevitable. After November, I believe we will find catastrophic health insurance being advocated first, as the Government feels its way along the financial limitations the economy has put upon it. Subsequent to that and dependent upon the economy, there will be a push for some sort of National Health Insurance. We must continue to be involved and influence the structure of the health care delivery system

in a manner which will best serve the patient and our own interests.

Topic VI—PSRO

This controversial program, and KMA's position on it, recently was placed before the physicians of Kentucky, and we all know the results. It is felt that by the individual physicians supporting the KMA-advocated PSRO in Kentucky, we will have a voice in this very significant program. Hopefully, we can make our ideas and suggestions known and our wishes carried out through KPRO. I can only feel that we must stay involved in this program as we are in all others. I would hope that each of us would forget past statements, ideas, and performances so that we can all get behind the will of the majority.

Topic VII—Public Law 93-641—Health Service Agencies

Another source of concern for all physicians is Public Law 93-641. This piece of legislation does more than almost anything has done in the past regarding health care delivery and has already caused turmoil. It is being challenged in the courts and is being declared as the blueprint for socialized medicine. The vestment of this immense power into a lay-controlled board, with a minimum of physician involvement, is questionable, to say the least. To me, personally, the law seems to epitomize attempts by the consumer-public to become involved in the health care delivery system. We physicians must be involved with this law, as frustrating as it may be, and we must resist attempts to override our voice in health matters. As captains of the health team, we have a moral duty to make our views known, in spite of the fact that these views are not accepted at times and are, in fact, rejected. Recent developments in HSA West in Kentucky are but examples of how we must continue to exert leadership in this field, and collection and interpretation of the data collected is a more specific example of where our leadership is needed.

Topic IX—Membership

Membership in the local, State, and National society have remained relatively constant in spite of monetary increases and assessments. I think this speaks well for those of us who are participants, but it does not speak well for those of us who are not. The farther removed organizational activity is from the individual physician, the less interest he has for participating. This is the main problem with AMA membership, exemplified by the question, "What is AMA doing for me?" As we get involved with issues which are affecting each of us daily, interest in organizational activities will grow. Certainly physicians have little input on the National scene individually, but we do through KMA and AMA. The problem, however, in organizations as large as these is that divergent membership views make it difficult for all to feel their individual views are being expounded. When the majority views are being expressed, you are, by necessity, not expressing the minority opinion. Such are our present-day frustrations!

In the midst of this dilemma, I can't help but take this opportunity to decry the seemingly ever-present derogatory statements emanating from other parasitic physician organizations which declare themselves to represent a segment of organized medicine. To me, the only thing this does is further divide physicians, serving no useful purpose other than voicing the views of the minority and attempting to express them as the majority opinions. As distasteful as it seems, it is my opinion that those who are continually uttering blasphemous statements regarding the will of the majority must be faced, and although this is a free Nation, one wonders how much organizational in-fighting can be tolerated and just how far the majority rule extends. I personally wonder how long we can allow these detractors to expound their undermining effects. This, too, I would leave to heads much wiser than mine.

Topic X—Medicare-Medicaid Problems

These two federally-funded programs are still with us, although their existence is in doubt, in view of proposed legislation forthcoming in the next year. Suffice it to say that the Board of Trustees and your officers have met with representatives of both these agencies in the past few months expressing our views, concerns, and your opinions regarding matters in their related field. The Title XVIII carrier was contacted regarding area fee discriminations, discrepancies between physicians first entering practice and established physicians, and fee profiles for each physician. In addition, we have and are meeting with State officials trying to implement the full usual and customary fee concept for in-patient Medicaid services.

Topic XI—Allied Health

With each General Assembly that convenes, there appears to be renewed problems related to fields of allied health. It appears to your President that more direct lines of communications between the allied health groups and the KMA should be established between the General Assembly sessions. Invariably, it seems that a month or so before the General Assembly convenes, the Legislative Committee deals with individual pieces of legislation on a pressure basis and that a great deal of this pressure could be relieved by on-going discussions.

This is particularly true in view of the new "physician extender" concept. In the past General Assembly the Physician's Assistant Bill caused a great deal of problems for your Legislative Committee. The 1975 House of Delegates endorsed the physician assistant concept and urged the Legislative Committee to seek appropriate legislation for its approval. Physician's assistant legislation did not come out of the General Assembly, but it will surely come up in the 1978 General Assembly. It would be wise then to have the Legislative Committee instructed as to the desires and wishes of the House of Delegates on this important subject.

Topic XII—Health Care Cost

One of the most significant problems which your leadership has faced in the past year has been the ever-rising cost of health care and the demand by the public for remedial solutions. An ad hoc committee of the Board of Trustees was appointed, and its report is available to you. I would like to thank Doctor Walter Hume for chairing this Committee and congratulate him on his work. In addition, you have available to you a letter from J. Ed McConnell, Past President of Blue Cross and Blue Shield, in which he expressed his views concerning this important subject.

The general inflationary rate has certainly had its effect on health care costs, and it is often said that the health care costs exceed that of the general economy. Unfortunately, physicians' fees are often associated with other health care costs, but in spite of everything, our field truly is experiencing an inflationary spiral.

The quality of health care being delivered today is one reason for these escalating costs. Increased scientific knowledge, gained within the past number of years, has resulted primarily from the use of complicated, scientific equipment which costs large sums of money. This equipment is commonplace in hospitals today and significantly raises the cost of health care delivery. It has almost gotten to the point where the health care being delivered is exceeding the ability of the public to pay for it. There seems to be a trend toward stressing health maintenance or prevention in an attempt to curb the cost of health care delivery, and physicians should become aware of this and help in this aspect.

A. *Physician Education*: Physicians in general, as captains of the health care team, initiate health care programs which result in the patient's care. It behooves us, therefore, to become familiar with the cost of tests performed and orders given. In addition, we must continually strive to improve our utilization review and peer review so that we can truthfully answer to the public that we are striving for economy. In this regard, organized medicine should squarely and forthrightly face the problem of the aberrant physician and physician groups who are charging exorbitant fees. This is a very complex issue for, on the one hand, we, as a profession, abhor those among us who are guilty of over-charging and, on the other, the Federal Government is accusing our profession of collusion and price-fixing. Both our universities should be encouraged to offer courses in medical economics for medical students so that they too may become aware of the economics of the practice of medicine.

B. *Patient Education:* Education of our patients in an effort to have them understand reasons for physician economy moves should be exploited. Our good friends, Blue Cross and Blue Shield, should be encouraged to continue with the efforts in the advertising media so that the patients and consumers may become knowledgeable as to the routine cost of health care delivery today.

C. *Regional Planning:* Physician efforts in regional planning should be continued, for abdication of our leadership role in the health field to lay persons will serve no useful prupose, but will increase rather than decrease the cost of health care delivery. As stated previously, at times this is a very obnoxious but necessary job.

D. *Alternate Methods of Health Care Delivery*

(1) There should be a general effort by all of us to utilize out-patient facilities to a much higher degree. This should be done on the part of each of us as physicians, instructing our patients as to its benefits and encouraging fiscal intermediaries to offer ambulatory coverage to the consumer. Blue Cross and Blue Shield has extended its benefits to cover accidental, out-patient care, but they should be encouraged to offer more incentives for extension of ambulatory out-patient care delivery. The Advisory Committee to Blue Cross and Blue Shield has faced this problem without coming to a solution. However, a solution is desperately needed.

(2) Primary care centers are being advocated in an effort to encourage ambulatory care. Organized medicine should recognize these centers as a possible beneficial method of ambulatory care, but they should be watched closely and be developed under our guidance rather than in spite of our objections. These centers will employ physician extenders, but free-standing physician extenders have no place in the medical system. Rather they should be the responsibility of the physician and work under his direction.

(3) HMO legislation mandating the employee's option for this method of health care delivery is with us. We only have to look at Jefferson County to realize the significance of this, for there are at least 4,000 companies employing the minimum number of employees to which the option of HMO legislation must be offered.

Organized medicine has endorsed the experimental concept of HMO legislation, but certainly not to the exclusion of the present system. We should encourage the experimentation of this method of delivery, but realize that, if Federally supported, any cost savings that might be derived would have to be viewed in light of Federal support. There are serious doubts in my own mind as to whether the HMO method of delivery can truly save the public money. Conversely, it now appears to be much more expensive. In addition, the concept of "health maintenance" must be viewed with some pessimism, for although the idea of maintaining one's good health is laudatory, from a practical standpoint, we all know there is some question as to the value of mass routine evaluations when put in the light of cost savings.

It would be my recommendation that we encourage the establishment of a Health Care Cost Council, under the auspices of the Kentucky Medical Association, and that this Council be composed of 20 to 25 individuals, one fourth to one third of whom would be physicians. The others would come from the segments of the population, such as the Medicaid and Medicare representatives, Blue Cross and Blue Shield, labor, Chamber of Commerce, Health Insurance Council, Council of Older People, allied professional groups, etc.

Finally, I would also recommend, in an effort to face the problem of rising fees, that the House of Delegates endorse the statement of policy advocated by the Ad Hoc Committee on Health Care Costs which states, "increases of fees should generally be limited to the cost of living or be justifiable as a result of documentable increases and overhead costs" and that "failure to adhere to such recommendations may be likely to accelerate the restrictions applied to medical practice."

Topic XIII—Peer Review

Peer review is our answer to the Federal Government regarding the control of the medical profession. There exists within the structure of KMA basic elements, which have been developed over the years. These elements include the Judicial Council, Medical Licensure Board, Claims and Utilization Review Committee, and a Committee on Physician's Health.

The Judicial Council's responsibility is in the field of individual ethics and conduct. It serves as an unofficial clearinghouse for grievances, on a consultative basis, with the referral route being determined by staff, under

the direction of legal counsel and the Judicial Council Chairman. The Judicial Council assumes an active role as an arbitrator, through the use of KMA's Trustees in routine grievances in their districts, with the appeal mechanism being the Judicial Council itself. Ultimate referral is to the Medical Licensure Board and periodic reports to the Executive Committee.

The Medical Licensure Board is a Governor-appointed body for the control of the practice of medicine in Kentucky. The Board consists of seven members, one of whom is an osteopathic physician and one of whom is a non-physician. All are appointed for staggered terms, and the Deans of the two medical schools are ex-officio, non-voting members.

The Board has the established policy of giving the FLEX examination as the official licensing examination and within recent years has spent an increased amount of time with disciplinary problems. The senile or psychotic physician, abusers of drugs or alcohol, the illegal prescriber of narcotics, insurance chislers, physicians with ethical problems, and finally those who are giving poor quality of care are examples of who comes under the purview of the Medical Licensure Board. It must be remembered that when problems are to come before this Board, they must be of such nature that they can be proven legally.

The Claims and Utilization Review Committee deals with those matters concerning fees and utilization, according to guidelines set forth. In addition, it reviews patient complaints from referral of the Judicial Council, pursues problems of quality of care as far as possible through carrier records, talks with local committees and trustees, attending physicians and hospital administrators. Referrals are made through the Judicial Council and the Licensure Board when appropriate. The physician whose financial fee profile is found to be excessive is seen by this Committee, and some guidelines from the House of Delegates to this Committee are needed for the handling of these offenders.

The Committee on Physician's Health limits its concern to evaluation and recommendations dealing with practice problems that suggest an impairment of a physician's health. The Committee functions in coordination with the Judicial Council of KMA and should be appointed yearly by the Board of Trustees. It has been suggested that most of the referrals come through the Judicial Council, although the Committee may accept referrals directly from an individual physician or relative, local or county administrative authority. The Committee has an advisory function, with no authority, channeling its observations and recommendations to the impaired physician, the physician's family, or to the Judicial Council.

The activities of each of the KMA groups could be assisted, I feel, by the creation of a separate investigative mechanism. Where the Board of Medical Licensure has investigators available to it from the Bureau of Narcotics and Dangerous Drugs, KMA has to rely on information supplied by third parties or from busy practicing trustees and officers. I feel some consideration should be given to setting aside monies to pay the expenses of physicians or to fund trained lay or legal investigators who would be responsible to KMA's peer review groups. Perhaps some retired physicians could be used in this manner or separate legal services could be retained. I think it is a thought worth pursuing.

The peer review process within the KMA structure needs, in the mind of your President, consideration of the individual physician's medical competence and his pattern of medical practice. The Continuing Medical Education Program is in the process of being formulated, and the fruits of this program will be borne in future years. Individual specialty society involvement in KMA needs to be stressed, for it is through specialty society participation in KMA that the Quality Assurance Program can best be monitored. There needs to be more emphasis placed on this mutual participation by both parties, KMA and the individual specialty society. This could probably be best handled by the Interspecialty Council of KMA.

In the past year it has become apparent that one of the more basic elements of organized medicine is the hospital medical staff. In my opinion, we have delayed this recognition too long. It would be my recommendation that we establish a Department of Medical Staffs within the KMA structure. The purpose of this Department would be to develop lines of communication by which then a further methodology of physician quality assurance would be available to us. It is suggested that this Department utilize representatives of selected hospital staffs, appointed by the Board of Trustees, and that the Kentucky Hospital Association be asked to participate on a consultative basis.

This, ladies and gentlemen, concludes my remarks. It has been a pleasure to serve you in the past year. I appreciate your help, your friendship, your patience, and most of all, your understanding.

Thank you very much.

David A. Hull, M.D., President

Recommendations, Reference Committee No. 1

Reference Committee No. 1 has reviewed the entire Report of the President. This Committee would like to thank him for a very complete report and for his outstanding quality of service to the Kentucky Medical Association. This Committee noted with appreciation that the President of KMA is the voice of the House of Delegates and we commend Doctor Hull for his extensive representation throughout the past year.

With reference to the President's recommendation to have the Board of Trustees meet on a more frequent basis, this Committee concurs with this recommendation, although we feel it would be inappropriate to have a predetermined schedule for the full Board of Trustees to meet. We further concur with the recommendation that the Delegates and Alternate Delegates to the AMA meet with the full Board prior to the AMA conventions and that the Alternate Delegates be voting members in the absence of the primary Delegates to the AMA.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

Regarding the President's comments about KEMPAC, in view of testimony heard by this Reference Committee, we do not feel an ad hoc committee for KEMPAC is necessary at this time.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Regarding the President's comments about health service agencies, this Committee strongly concurs that physicians, as captains of the health team, exert informed and active leadership. We further recommend that KMA provide the necessary manpower for the collection and interpretation of demographic data as needed in these planning activities.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

Regarding the President's comments in the allied health fields, we would like to make the following recommendations and observations. The notion of creating subordinate practitioners by licensure should not be entertained, but rather principles of qualification and certification should evolve from a professional society.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

In view of the markedly increased enrollment in both medical schools in this Commonwealth and increased number of students in all medical schools of the nation as well as the increased number of medical schools, we suggest that activities to establish free-standing physician extenders should not be undertaken without comprehensive and substantial validation of need.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded, and the Speaker recognized the KMA President, David A. Hull, M.D. Doctor Hull suggested the above recommendation of the Reference Committee be amended to delete the words, "without comprehensive and substantial validation of need." The passage would then read, "In view of the markedly increased enrollment in both medical schools in this Commonwealth and increased number of students in all medical schools of the nation as well as the increased number of medical schools, we suggest that activities to establish free-standing physician extenders should not be undertaken."

On a call for the vote, the motion carried as amended.

After careful consideration of the President's report on health care costs, as well as that of the Ad Hoc Committee on Health Care Costs appointed by the Board of Trustees, and extensive discussion heard by this Committee, we would strongly recommend that 1) a standing KMA Committee on Health Care Costs be established, 2) recognizing that only 18% of all of the medical care dollar goes to the physician, we still recommend that all KMA members pledge to continue in an effort to hold down increases in health care costs by limiting any increases in fees for physicians' services to those necessary and justifiable for overhead and cost of living increases, and 3) KMA work toward the formation of a Health Care Council composed of leaders of interested segments of the private sector to evaluate this issue comprehensively and work to promote the delivery of quality medical care at the most reasonable cost.

The Committee recommends approval of that portion of the President's report and that portion of the Chairman of the Board of Trustees' report dealing with health care costs.

Mr. Speaker, I move the adoption and implementation of this section of the report.

The motion was seconded and the Speaker recognized the Chairman of the Board of Trustees, John P. Stewart, M.D. Doctor Stewart stated it was the Board's recommendation that the words, "and although this is 2+ percent less than in 1960," be inserted after the word "physician" in enumerated item 2 above. Another suggestion was entertained from the floor to modify the Board's suggestion by adding the words, "and *particularly since* this is 2+ percent less than in 1960," after the word, "physician," causing item 2 to read as follows: "2) recognizing that only 18 percent of all of the medical care dollar goes to the physician, *and particularly since this is 2+ percent less than in 1960,* we still recommend that all KMA members pledge to continue in an effort to hold down increases in health care costs by limiting any increases in fees for physicians' services to those necessary and justifiable for overhead and cost of living increases," . . .

On a call for the vote, the motion was carried as amended by the House.

We note with interest the President's remarks on peer review and the Committee recommends that funds be made available for field investigations as are needed. We further concur that there is much need for better communications among the specialty groups of KMA and the Headquarters Office.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

Report of the President, KMA Auxiliary

Your Auxiliary began the 1975-76 year by adopting a new name, "Auxiliary to the Kentucky Medical Association." Other changes made during the convention included: 1) Opening membership to both husbands and wives of physicians as the American Medical Association Auxiliary has done; 2) creating a junior membership for spouses of all medical students, interns, and residents, and 3) increasing the state dues from $4.00 to $8.00 to be effective the 1976-77 year. National dues will increase at the same time from $4.00 to $7.00 so the combined dues (State and National) will be $15.00 for the 76-77 year.

This year our goals, emphasizing the IMPORTANCE of each INDIVIDUAL member, were stated, each beginning with the essential "I".

INCREASED membership was accomplished with the aid of state awards, two workshops for county leader-

ship, and five MAL (members-at-large) meetings. All potential MAL's received letters from state officers and a personal note from the assigned district councilor. Letters, asking for assistance in organizing an auxiliary, were mailed to 12 key medical societies. Two new auxiliaries are being formed and one will receive its charter at this convention, Letcher County. With a new record auxiliary membership (1,477) the desire to band together to assist the medical association is evident.

INFORMED membership has resulted from publications and meetings. Ten issues of the presidential newsletter (Gerry's Hotline), and four "Bluegrass News" issues kept all members informed of duties and activities. The KMA Journal page, "Link in the Chain" supplied information to potential members and to the physicians. A directory-guide, given to all state and county leaders at the convention was mailed with a letter from the president to all MAL members. Open board meetings were held in the east and the west extremes of the state with workshops in AMA-ERF, Legislation, Safety on the Streets, Phoenix Project, Publicity, Communications, and Pre-School Screening. We co-sponsored an all-day KEMPAC Seminar in January under the able leadership of auxiliary member, Pat Schafer, who serves with three other auxilians on the KEMPAC Board. Four members attended the KMA State Legislative Committee meetings to assist in passing acceptable malpractice insurance legislation. Bulletins on the activities and progress of the General Assembly were mailed.

As president I have traveled to meetings outside Kentucky to gain information and training as well as to represent our organization. Five County Presidents-Elect from Glasgow, Ashland, Lexington, Paducah, and Bowling Green, and the State President-Elect accompanied me to Chicago to the Leadership Conference in October. The trips to the AMPAC Workshop in Washington, the Conference in Atlanta, the Indiana State Convention, and the National Convention in Dallas totaled 5,643 miles for out of state travel.

Within the state I have traveled 14,113 miles to share ideas and information with county auxiliaries. I met with MAL's at Middlesboro, Hazard, Jenny Wiley State Park, London, and Whitesburg. I also attended trustee meetings, Health Careers in Kentucky meetings, the Rural Scholarship Committee of KMA meeting, KEMPAC Seminar, Board Meetings, and numerous committee meetings.

INTERESTED members were apparent with record attendance at the Board meetings and the convention. The fall meeting focused on the restored home of Ephraim McDowell, M.D., in Danville. The Auxiliary has contributed $827.50 and a used electric typewriter to the McDowell House this year. A new typewriter was purchased for the office space alloted by you for the use of the Auxiliary. Other extra expenses this year included printing of bylaws, purchase of new pins for the President and President Elect, and new stationery, as our emblem was changed removing the lady's head and changing the name. The updating and reprinting of our 53-year-Auxiliary history has stirred enthusiasm in our accomplishments and renewed interest in local medical history in many counties. A copy of this history will be given to each person who registers at this Convention '76, which has as its theme "SOMETHING FOR EVERYONE."

INVOLVED members were found in Kentucky working in both the community and the state. A record fund-raising drive for the American Medical Association Education and Research Foundation netted $15,280.89 from various sales, the sharing Christmas card, and auctions. Physicians contributed $3,840.00 making $19,-120.89 total donation. Aside from loans to students, interns, and residents, $17,594.24 was given in unrestricted funds to the Deans of our two medical schools this year. A check for $10,895.62 was given to Arthur Keeney, M.D., Dean of the University of Louisville School of Medicine, and a check in the amount of $6,698.62 was presented to D. Kay Clawson, M.D., Dean of the University of Kentucky College of Medicine. This was an increase of $6,155.84 over the amount given to the medical schools last year.

At the request of the KMA Executive Committee, Key Women (138) were appointed to correspond with the Key Man System for each state legislator to work for KMA's legislative program. Posters aimed at winning the support of the public on the malpractice bill were distributed across the state by the auxiliary members. The LEGS ALERT system was set up statewide and responded to State Legislation and the National Health Manpower bill. Many members are active working on voter registration, supporting a candidate, and working for their party in varying capacities.

Over $30,000 was given this year in grants and interest free loans across the state to 50 students in Allied Health Careers. Eleven county auxiliaries have funds which are raised in different ways including a antique fair, a theater premier, and a square dance. In addition one dollar of each member's dues goes to the State Health Careers Loan Fund.

The Phoenix Project was a new statewide project cosponsored by the Kidney Foundation of Central Kentucky to help people to accept a new concept, the afterlife donation of needed organs for transplantation. Auxiliary members were trained to talk before civic and service clubs in their communities. They were furnished with large visual cards containing the main ideas and notes for a planned talk glued to the back. In the few months since the project began, talks have been given to over 3,000 and informational displays have been set up in hospitals, shopping centers, fair booths, court houses, and on public transportation. A minister's workshop was well attended and others are planned. Organ Retrieval information was furnished to physicians and hospitals. News stories and T.V. interviews of our state chairman, Jeanette Lucas, have helped to publicize our project and communicate to the public the Auxiliary's message of concern. I presented this project at the AMAA Convention in Dallas and it was well received. They plan to prepare a package program of our material for distribution to all of the state auxiliaries.

Over 150,000 hours were given in volunteer activities including screening programs in hearing, sight, scoliosis, kidney evaluation, hypertension, and learning difficulties. Blood donor and Red Cross programs now are active throughout the state. A child abuse symposium including a lay therapist training program, and six month commitment to work with abusive parents is active in Fayette County. Nutritional programs for the aging,

Health Career Days, films, and pamphlets on V.D., safety, and hypertension are used in other counties. Safety decals for home windows, wigs distributed to cancer patients, contributions to International Book Project and the GEMS (Good Emergency Mothers) program to train babysitters are just a few of the community projects of local auxiliaries.

The Public Health Services of Kentucky recognized one auxiliary with the Group Effort Award for the screening of children in Harlan County. Many communities paid tribute to the pioneers in medicine as a part of the community Bicentennial celebration noting the contribution made by its physicians. Increased newspaper coverage, radio, and television have highlighted the community involvement. An IMPROVED IMAGE of the physician's family and his profession resulted in many areas as we worked together to serve needs and to build understanding. This year by INVESTING time, talents, energies, and resources the Auxiliary has INCREASED, INFORMED, INVOLVED, INTERESTED membership working on health related needs, legislation and critical issues, and stimulating the community to action, caring, working, and sharing in the family, church, and the community.

The word "Auxiliary" as defined by Webster is "helper, assistant, an associate in some undertaking." It has been our desire this year to be this to you of the KMA. We are very appreciative to you for your consideration, your continued financial support, and to the staff for their assistance in many ways. Thank you for letting us serve with you.

Mrs. Wally O. Montgomery, President

Recommendations, Reference Committee No. 1

The Report of the President of the KMA Auxiliary has been reviewed with much interest. We would like to congratulate the Auxiliary for their increased membership and activities. We congratulate the Auxiliary and express specific appreciation to their President on the accomplishments of the past year.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the President-Elect

The office of President-Elect was established in order that the incoming President of the Association would have a year of concentrated study, training, and exposure to all the affairs that affect the members of KMA and AMA. During several years as delegate to this House, six years as Trustee (last year as Chairman), and this year as President-Elect, I have had opportunity to review and reflect on previous directions you have given this Association and believe your officers have carried out your instructions to the best of their ability. They will continue to do so with your help and understanding.

This year has been a busy one, beginning with the Officer-Staff Orientation meeting at Kentucky Lake immediately after the last House of Delegates meeting. There have been several meetings with the Executive Committee, the Leadership Conference in Chicago, the Program Committee for this year's convention, the meetings of the Budget Committee, several meetings of the Board of Trustees, a special meeting of the House of Delegates, numerous meetings of the Quick Action Committee, the AMA Convention in Honolulu and Dallas, Blue Cross-Blue Shield Board meetings and this House of Delegates meeting. This has required 47 days out of the office to attend these meetings in addition to reading reams of material in preparing for each of them.

I have not listed these activities to complain but in order that you will be more aware of the vast amount of time, energy, and preparation necessary by all of your officers to carry out their duties for the Association. These meetings and conferences have given me a better understanding of organized medicine's problems and I trust some knowledge of how to help solve them. If in all of them it has helped me to help you, they will have been worthwhile.

Paul J. Parks, M.D., President-Elect

Recommendations, Reference Committee No. 1

The Report of the President-Elect has been reviewed and the Committee wishes to extend its best wishes to Doctor Parks for a successful term in office.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Speaker of the House

I, as your Speaker, and Doctor McElvein as your Vice Speaker, would like to take this opportunity to thank all of you for your support and cooperation during the past year.

I would especially like to commend all those attending the special called meeting of the House of Delegates on February 26 for their attention and consideration of the important business at hand. You certainly made our job much easier than anticipated.

As most of you know, our Vice Speaker, Doctor McElvein, is leaving Kentucky to assume a teaching position in a nearby state and therefore must resign his position as Vice Speaker.

I feel that I can speak for all members of KMA in that we wish the very best for Doctor McElvein and his family in his endeavor—and even though we hate to see him leave, we do appreciate all his support and endeavors in KMA.

Special thanks to all KMA Staff for their excellent work and for making the position of Speaker and Vice Speaker a pleasant experience.

Let me once again ask that next year the society secretaries submit the names of your delegates-alternates as early as possible so that we may have more choice in selection of Committees.

Carl Cooper, Jr., M.D., Speaker, House of Delegates

Recommendations, Reference Committee No. 1

The Report of the Speaker of the House has been reviewed. Doctor Cooper's report does not reflect the dedication and special efforts he exerted during the legislative session this past year, but this Committee would like to make special note of his extraordinary efforts. For this we are most grateful.

We note with regret the departure of Doctor McElvein from the state and send with him our best wishes for success in his new position.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Chairman, Board of Trustees

Introduction

With this report comes the completion of another KMA Associational year and wraps up the activities of the Board of Trustees, Executive Committee, and Quick Action Committee, along with all of the standing and ad hoc committees.

This has indeed been an unusual year. It has been a year where staff and your elected officials have had to give more time than ever before to conduct the business of the Association. It has been a year of anxiety and frustration as we have dealt with many complex problems, such as Liability Insurance, Health Service Areas, and those old "standbys" like PSRO, Medicaid, Medicare, and other governmental medical programs. The nature of the animal that preys upon Medicine today and continues to attack our professional freedoms also causes conflict and occasional division within our own ranks. This we cannot let happen as we would be falling into the trap set for us. Only through unity will we be in a position to preserve what has always made ours the greatest of all professions. Through a unified effort, physicians and their patients will prevail.

One yardstick of the activities conducted this year could be the comparison of just one year ago when the Board and Executive Committee held 13 meetings, while during this Associational year, 20 meetings of the Board and Executive Committee were conducted, and many of them were two-day sessions. In addition, the Quick Action Committee (President, President-Elect, and Board Chairman) met an additional 10 to 15 times to consider matters of an urgent nature.

Your officers and Board members have found themselves in many perplexing situations; Liability Insurance is just one example. In keeping with the desires of this House of Delegates that the Liability Insurance market be kept open by the passage of legislation, a tremendous amount of time and effort was devoted to resolving what was done in every other state, dissecting our own Kentucky problems, proposing solutions, debating with opposite viewpoints of other groups in attempting to maintain KMA's position, and fighting for Kentucky physicians through a fierce legislative maze during the Kentucky General Assembly to get a law passed in keeping with the guidelines approved by this House.

Your Speaker, Doctor Carl Cooper, who also served as Legislative Chairman for State Affairs this year, literally spent day after day in Frankfort and was constantly battling for the physicians of Kentucky. His effectiveness was recognized by all those with whom he had contact. Coming from an area with a physician shortage, he worked doubly hard to give of his time to his profession and we are eternally indebted.

More and more decisions that affect all of us have to be made in Organized Medicine today. These decisions cannot be postponed and are made only after considerable deliberations and review of the information available at the time. While some might find it easy to criticize through hindsight and often a lack of facts, KMA has always tried to act for and through the grassroots physicians.

Last year's Liability Insurance assessment totaled $125,610 received in the KMA Headquarters Office. We had numerous physicians give over and above the assessment, some contributed who were not even regular members, and some specialty groups voluntarily helped add to our total. As of today, there remains $37,670 in that assessment pool. The expenditures totaled $91,941 which included an extensive Public Relations campaign handled by a PR firm, the establishment and operation of a special Frankfort Office for KMA, and abundance of specialized legal services, salaries to include outside research and lobbying assistance, postage, mailings, etc. There were, as of this writing, 175 KMA members billed for the assessment whose remittance was never received in the KMA Headquarters. I look to the wisdom of this House as to what action, if any, should be taken concerning those who remain delinquent.

The legislative picture demands, I think, we continue our Frankfort Office and keep our legal assistance in Frankfort available to us to handle state legislative and regulatory matters. Much of this will evolve around Liability Insurance and your Board feels it desirable and essential to utilize the remaining assessment funds in pursuing Liability Insurance matters (including the KMA Insurance Company) and to continue our legislative procedure in Frankfort by maintaining the availability of services of legal counsel in our Capital city.

I recognize I have been discussing only one subject, and there are many major issues I would like to thoroughly present to you. I would expect they are covered in other reports, so to conserve your time I would like to give you a brief summary of our Board proceedings. Detailed minutes of all Board and Executive Committee meetings are being presented to Reference Committee No. 1 for information and referral if necessary.

First, I want to express my appreciation to an outstanding group of physicians, the members of your Board of Trustees. They met on short notice, worked diligently in your behalf, and gave much to Organized Medicine without any compensation except for the satisfaction of knowing they are performing a needed function for the profession. The members of the Executive Committee have gone far beyond the call of duty this year to assure the best possible results. I am deeply indebted to them. Staff has seen a year go by when their time away from the job was limited and they all pulled together harmoniously under quite often adverse conditions, and performed admirably for KMA. The Committee Chairmen and members also found the going tough and more time required to do their job, and to them I express my appreciation.

I thank the members of the Board for allowing me the opportunity to serve as Chairman this year. Earlier in this report I went into some detail on just one problem. It is brought to your attention just as an example because we had many other challenges that took many

hours of work. It has been a year of excitement, sometimes with frustration; sometimes elation. It has been a year of many accomplishments. I feel I have learned much. I know the Board and Executive Committee have had a tremendous amount of information made available to them, and they have acted in a democratic fashion on behalf of all of us. They are all deserving of your gratitude.

Following the reports of the Board will be summaries of the activities of the Ad Hoc Committees of the Board.

Summary of Board Meetings

First Meeting, September 25, 1975

Acting as temporary Chairman, KMA Secretary-Treasurer, S. Randolph Scheen, M.D., introduced the newly elected members of the Board as follows: John M. Baird, M.D., Danville, Vice-President; Cecil L. Grumbles, M.D., Louisville, Fifth District Trustee; Earl P. Oliver, M.D., Scottsville, Sixth District Trustee; and Dwight L. Blackburn, M.D., Berea, Eleventh District Trustee.

The Board then elected the Executive Committee members to serve with the President, President-Elect, Vice-President, and Secretary-Treasurer for the 1975-76 Associational year. Chosen as Board Chairman was John P. Stewart, M.D., Frankfort, and Vice-Chairman, James B. Holloway, Jr., M.D., Lexington. Harold L. Bushey, M.D., Barbourville, and William T. Watkins, M.D., Somerset were also named to the Executive Committee to represent the Board of Trustees.

Elected to serve on the Board of Directors of the Kentucky Foundation for Medical Care were Harold L. Bushey, M.D., Barbourville; Frank R. Pitzer, M.D., Hopkinsville; William T. Watkins, M.D., Somerset; Ellis A. Fuller, M.D., Louisville; and Joseph G. Whelan, M.D., Louisville.

Robert N. McLeod, Jr., M.D., Somerset, and Harvey A. Page, M.D., Pikeville, were named to the KEMPAC Board; and several names were suggested for appointment to a Medical Laboratory Advisory Committee with the final selection to be made by the Quick Action Committee.

In view of a Bylaw change made by the 1975 House of Delegates, it was taken by consent that the Quick Action Committee members, along with the Secretary-Treasurer, Executive Director, and Assistant Executive Director, be authorized to sign checks written in the KMA Headquarters Office.

A motion was made, seconded, and passed that the KMA membership be immediately assessed $50 per member for purposes of the Professional Liability Insurance program, in accordance with the direction of the 1975 House of Delegates. The Executive Committee was also authorized by the Board to make a financial commitment to a public relations firm and others as necessary to implement the Liability Insurance program.

Members of the KEMPAC Board met briefly with the KMA Board to discuss plans involving legislation and political action in the immediate future.

The Board reviewed and held lengthy discussions on appointment of members to KMA Committees for the 1975-76 Associational year.

It was the consensus of the Board members that staff should discuss with the Executive Committee the advisability of again holding another Convention at the Ramada Inn Bluegrass Convention Center.

Before adjourning, the Chairman set the date of the next Board of Trustees meeting as December 17-18, 1975 at the KMA Headquarters Office in Louisville.

Second Meeting, December 17-18, 1975

The second regular session of the KMA Board of Trustees was held on December 17-18 at the KMA Headquarters Office. The President's Report, Headquarters Office Report, and AMA Delegate's Report were reviewed and accepted for information.

The Board appointed members to a new Committee on Health Care Costs and various other committee appointments were also made.

The current status of Blue Shield's participation in CHAMPUS and the Individual Practice Association was reviewed by a Blue Shield representative.

Provisional accreditation of the Louisville Area CME Consortium was approved by the Board and final accreditation authority was turned over to the Committee on Continuing Medical Education.

Approval was given by the Board to sponsor a one-half day workshop on "Financial Control of Your Medical Practice." The re-election of Carroll Witten, M.D., to the AMA Constitution and Bylaws Committee was given support by the Board.

The Board reviewed and took action on numerous legislative proposals before the 1976 Kentucky General Assembly which were presented by the Committee on State Legislative Activities.

A discussion was held on the report of the Task Force on Medicine of the Council on Public Higher Education. An ad hoc committee was appointed to study this report and to keep KMA informed of the Council's activities.

* * * * *

Fifth Meeting, April 8, 1976

The KMA Board of Trustees met on April 8 at the Headquarters Office in Louisville. The President's Report and Headquarters Office Report were reviewed, noting that an extensive effort had been made by the officers and staff in regard to the recent professional liability insurance campaign in the Kentucky General Assembly.

The budget for fiscal year 1976-77 was approved by the Board and it was noted that 227 regular, active members have not paid the 1975 special dues assessment which was passed by the House of Delegates.

The Board of Medical Licensure reported that plans for the implementation of the CME Program are now being finalized. W. Neville Caudill, M.D., Louisville, reported on the activities of the Kentucky Peer Review Organization in regard to application for a conditional grant as the PSRO in Kentucky.

The Board made nominations to forward to the Governor for physicians to serve on the Board of Medical Licensure and an Advisory Committee on Implementing Liability Insurance Legislation.

The Board appointed an Ad Hoc Committee to Overview KMA Peer Review Activities which will study KMA's current activities in monitoring quality of care.

The Hospital Committee was instructed by the Board to develop an appeals mechanism for those physicians who feel they have been unduly denied hospital privileges. Other reports reviewed were those of the Ad Hoc Committee on Mental Health-Mental Retardation and the Ad Hoc Committee to Study the Report of the Council on Public Higher Education.

It was announced that tours of the new Blue Cross-Blue Shield Service Center would be arranged during the KMA Annual Meeting. Recognition as a specialty group was given to the Kentucky Society of Allergy and Clinical Immunology.

In other action the Board recognized the efforts of the Louisville Area CME Consortium by presenting Ellis Fuller, M.D., Louisville, a certificate of accreditation for the Consortium. This represented the first KMA accreditation survey.

Checks totaling over $17,000 were presented to the deans of the two medical schools in Kentucky from the AMA-ERF fund. The funds came about as a result of efforts of the Auxiliary members across the state. Doctor Hull expressed his appreciation to the Auxiliary for its year-long efforts in helping make these funds available to the medical schools.

Sixth Meeting, July 22, 1976

A special session of the Board of Trustees was called for July 22 for the specific purposes of discussing three major items of concern to KMA; i.e., Liability Insurance, Health Service Areas, and Professional Standards Review Organizations.

The meeting was designed to both inform the Board members fully of the current status of these topics and offer them an opportunity to make inquiries from resource persons who had been invited to discuss these subjects. Approximately two hours were devoted to each of the subjects and it was felt that the meeting was most beneficial to the members of the Board.

In other action during the day, the Board ruled that a Vice-Speaker of the House of Delegates would be named at the August Board meeting to serve during the 1976 Annual Meeting, at which time the House would elect a Vice-Speaker who will complete service of an unexpired term of two years remaining. They further ruled that an AMA Alternate Delegate position that became vacant would also be filled by the House of Delegates at their meeting. There is one year remaining in this two-year term.

Seventh Meeting, August 11-12, 1976

The August meeting of the Board is primarily designed to review the Committee reports prior to their being submitted to the House of Delegates and to record the actions of the Board on each report for House consideration. Committee Chairmen and Trustees discussed all reports in considerable detail. The Trustees had been assigned specific reports in advance so that each report could be thoroughly studied. Additionally, reports were presented by the President, Senior Delegate to the AMA, and Secretary-Treasurer.

The Board named a Vice-Speaker of the House of Delegates for the 1976 Annual Meeting to replace Richard McElvein, M.D., who moved out of the state earlier in the year. The House will elect a Vice-Speaker on Wednesday evening, September 29, to complete the last two years of Doctor McElvein's term.

Named Editor of the KMA *Journal* for the next two years was Henry B. Asman, M.D., and a special tribute was paid to Walter I. Hume, Jr., M.D., who has served as Editor the past six years, and as Assistant Editor for the preceding four years.

Various Committee activities were reported and recommendations made. The Judicial Council nominee was elected for presentation to the House of Delegates, and a discussion was held on the test suit regarding the Liability Insurance law.

The final session planned by the Board of Trustees was set for Sunday, September 26.

Summary of Ad Hoc Committee Reports

It is again with deep appreciation to the members of the Ad Hoc Committees of the Board that I report on their activities. Recommendations of the Ad Hoc Committees receive final action by the Board as they report at various times during the Associational year. The following very brief summaries are for the information of the members of the House of Delegates with a notation that detailed reports of each Ad Hoc Committee are being made available to the Chairman of Reference Committee No. 1. He will have additional copies should you desire to pick copies of any or all of them up for your own use. This year we had eight active Ad Hoc Committees.

Ad Hoc Committee on Mental Health-Mental Retardation

The Ad Hoc Committee on Mental Health-Mental Retardation, chaired by Homer B. Martin, M.D., has had another busy year monitoring Kentucky's mental health centers. The House of Delegates last year asked KMA to request the Governmental Accounting Office to evaluate cost procedures of these centers. We received a most cooperative effort from the GAO which agreed with our criticisms and outlined a number of deficiencies to one center under discussion for that center to correct, and provided KMA with an 89-page report to Congress entitled, "Need for More Effective Management of Community Mental Health Centers Programs." We feel responsible action is being taken. The Committee's detailed nine-page report is available at Reference Committee No. 1.

Ad Hoc Committee on Professional Liability Insurance

The Ad Hoc Committee on Professional Liability Insurance, chaired by Thomas M. Marshall, M.D., saw much activity this past year. Many meetings were conducted and the Committee members also were utilized as KMA's official representatives for governmental committees dealing with regulations and other Liability Insurance matters.

Ad Hoc Committee on Podiatry

The Ad Hoc Committee on Podiatry, chaired by D. Kay Clawson, M.D., was comprised of both physicians and podiatrists. They made four recommendations approved by the Board concerning: 1) Exchanging of speakers at meetings; 2) Legislation; 3) Education and continuing education; and 4) Hospital staff privileges. Of these four, perhaps hospital staff privileges has the most widespread interest.

The Committee learned much about the current educational requirements of podiatrists, and that they have approved residency training of up to three years. The Committee's report as adopted by the Board states that "The Kentucky Medical Association endorses the position of the AMA Board of Trustees in disapproving the position of the Joint Commission on the Accreditation of Hospitals opening hospital staff membership to podiatrists. The Committee notes the wide spectrum of education and training of podiatrists, and therefore recommends that clinical privileges for podiatrists remain a matter for decision by the individual hospital and its staff with the granting of any hospital privileges based on (a) the regulations in the hospital's Bylaws; (b) the findings of the hospital Credentials Committee; (c) the availability and willingness of a physician member of the staff to sponsor the patient and care for the general medical requirements; and (d) the willingness of the Chief of Surgery of the hospital to monitor operating privileges based on education and training of the individual podiatrist."

Ad Hoc Liaison Committee with Optometrists

The Ad Hoc Liaison Committee with Optometrists, chaired by Carl Cooper, M.D., addressed itself to legislative changes proposed by the optometrists, which met with opposition from KMA because the legislation apparently would be expanding the practice of optometry into the area of medical ophthalmology by legislation enacted, rather than through total, adequate education. The optometrists subsequently introduced the legislation into the Kentucky General Assembly but it did not pass.

Ad Hoc Committee to Study the Overview of KMA Peer Review Activities

I hope you will also pick up a copy of the report of the Ad Hoc Committee to Study the Overview of KMA Peer Review Activities, chaired by President David A. Hull, M.D. Representatives of the Judicial Council, the Board of Medical Licensure, Claims and Utilization Review Committee, and the Committee on Physicians' Health all served with the President and President-Elect on this Ad Hoc Committee designed to knit together the best possible mechanism of professional monitoring. Further Committee work seems indicated to complete the task at hand, and Doctor Parks will no doubt work toward the goals of this Committee in the coming year.

Ad Hoc Committee to Study the Report of the Council on Public Higher Education

The Ad Hoc Committee to Study the Report of the Council on Public Higher Education, chaired by James B. Holloway, Jr., M.D., had the responsibility of digesting a very detailed report concerning the medical aspects of an overall report prepared by the Kentucky Council on Public Higher Education. The report dealt with health manpower, physician shortages in rural and intercity areas, use of physicians' assistants, medical school admission policies, residency training, etc. The Committee met with Richard H. Swigart, Ph.D., staff for the Task Force on Medicine, where a number of matters were discussed in detail, and the Committee received full information on all of their inquiries. As a result, the Board expressed some opinions to the Council on Public Higher Education, and KMA's input was received favorably and further communication encouraged.

Ad Hoc Committee on Multi-County Societies

The Ad Hoc Committee on Multi-County Societies, chaired by Thomas L. Heavern, M.D., met three times this year to evaluate the concept of and suggest methods for forming multi-county groups. Some areas of the state had special meetings to discuss the formation of multi-county societies, and it is anticipated that the formation of some of these should be soon forthcoming. The Committee feels that multi-county societies should maintain local activity with individual counties, but share common goals through the major group.

Ad Hoc Committee on Health Care Costs.

The Ad Hoc Committee on Health Care Costs, chaired by Walter I. Hume, Jr., M.D., demonstrates another major effort KMA initiated during the past year. There is obviously much ahead as a result of the plans laid out by the Committee members. The Chairman reported to the Board a number of primary areas in which the Committee felt Organized Medicine could have input, including physician education, patient education, regional planning, and physicians' fees.

The Committee reported that KMA, through the Board, should take the lead in coordinating the development of a multi-interest Council on the cost of health care which would include representatives from the Governor's office, Medicaid, Medicare, Kentucky Chamber of Commerce, Industry, Organized Labor, third party carriers, allied groups, Kentucky Association for Older Persons, the Commissioner of Insurance, a member of the General Assembly, and others, as well as KMA members who would comprise approximately one-third of the Council. The Committee's statement as adopted by the Board is as follows: "Increases in fees should generally be limited to cost of living increases or be justifiable as a result of documentable increases in overhead costs and that failure to adhere to such recommendations may be likely to accelerate the restrictions applied to medical practice."

In discussing costs and the current health care system, the Committee felt that another priority might be a more militant behavior from KMA with regard to the people in Organized Medicine who take advantage of the system and flagrantly abuse it. The actions of the Committee were designed to be in the interest of preserving the private practice of Medicine, and they feel the council, if appointed, would be helpful in this regard.

John P. Stewart, M.D., Chairman
Board of Trustees

Recommendations, Reference Committee No. 1

The Report of the Chairman of the Board, except those portions dealing with liability insurance, was reviewed by the Reference Committee. This Committee recommends that notices by registered letter be sent to all KMA members who are delinquent in remitting the special assessment authorized by the House of Delegates of 1975. Should those members then fail to remit their assessment, the names of delinquents should then be

noted in *The Journal* prior to their automatic expulsion from the KMA.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

The Committee reviewed the remaining section of the Chairman of the Board's report. This Committee recommends that the Ad Hoc Committee on Mental Health and Mental Retardation be made a standing committee of the KMA.

(The motion was seconded and carried.)

We would like to express our sincere appreciation to the Chairman and the members of the Board of Trustees for their service and thank the Chairman for a very complete report on the activities of the Board during the past year.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

Report of the Secretary-Treasurer

This is my first year to report to you in my new office of Secretary-Treasurer. I feel that the combining of the two offices has been one that has worked out very well this year. I feel that it is beneficial for the operation of the day-to-day KMA business to have the Secretary in close proximity to the Headquarters. There are a number of items which come up from time to time which need to be resolved within one day primarily in respect to co-signing of checks and also in other matters related to the financial affairs of the Kentucky Medical Association. The combination of the two positions has not increased my workload a great deal but has been of considerable interest.

The dues increase of the previous year, which was so wisely voted by the House of Delegates, has been reflected in our statement of financial condition as of June 30, 1976. I think it will be very evident to all of the members the wisdom which they showed in putting this into effect. Our Kentucky Medical Association at this time is in sound financial condition and in your envelope you will have a statement of the financial condition which will give you the changes and the fund balances and the condensed statements of income and expense of the current fund, reserve fund, McDowell House, and medical education fund for the year ending June 30, 1976.

All members of the Kentucky Medical Association may, if they wish, see the complete reports of the audit for the fiscal year ending June 30, 1976, at the Kentucky Medical Association at the KMA Headquarters office, 3532 Ephraim McDowell Drive, Louisville, Kentucky.

Again, for those of you who have not been to our KMA Headquarters or the new members, I would like to extend an invitation to visit our Headquarters Office on Ephraim McDowell Drive. The Headquarters Office building is functional, attractive, and I think, one that you would all be proud of. Please take time and come out to look through the building. The staff would be most happy to have you and to show you around.

I will not go into the Judicial Council since that is covered by a separate report. I am, however, as you know, automatically on the Judicial Council. (Fortunately, the Council agenda remains manageable as I mentioned in my report last year.) I again feel that this is primarily due to the invaluable aid which our Trustees give us in investigating local complaints and resolving them at that level. I would like to certainly thank and commend all the Trustees who have helped us this year in resolving a number of problems regarding ethics in the care of our patients.

I would like to call to your attention that Mr. Jerry Mahoney, who has been with KMA for a number of years and has done such an outstanding job as our liaison with the Legislature, has left the organization. He has done an excellent job and we will certainly miss him in the future. I think if one only reviews the legislation which was approved and passed at the most recent Legislative session, one would realize that a great deal of work by Mr. Mahoney was reflected in these decisions and certainly I would like to commend him and say that we will miss him in the years to come.

Last year I reported to you that the Board met six times and the Executive Committee seven times. In addition I reported there were 70 other KMA Committee meetings and that all of the meetings involved a total physician attendance of 673 which included 6,985 physician hours sitting in those meetings with the same physicians having traveled 87,691 miles. Because of the tremendous workload this past year, all of the above figures have been surpassed rather significantly. They have nearly doubled in every category. For example, the Executive Committee and Board of Trustees have been in session 21 times and the number of physician hours and physician miles traveled has been much increased.

The number of other KMA committee meetings and sessions with allied groups that were recorded and the KMA offered, reach a total in excess of 200 meetings.

In addition to the in-state business being conducted by the Association, there is also an increasing amount of traveling required out-of-state and this year saw staff and KMA representatives attending 20 meetings outside of Kentucky requiring 56 days per person in attendance. I would estimate that the total number of miles traveled by KMA physicians during this past Associational year performing work of the Association on behalf of all Kentucky physicians was approximately one quarter of a million miles. I believe all of this points out that physicians are involved in their professional organization and that KMA is hard at work for all Kentucky physicians. A special word of thanks is extended to all of those members working for our profession.

I would like to call to your attention the activity of our KMA Headquarter staff. Their continuing excellence in their work is always of great gratification to me. It is difficult for one to realize how much background work goes into all of the committee meetings and all of the everyday operation of our Kentucky Medical Association. In addition to this, the work on the Annual Meeting is one that is almost constant from one meeting to another. I feel that our Annual Meeting is one of the best that any state in the country has and I think this is reflected in our attendance, both by technical exhibitors and our physicians of Kentucky. I would like to again sincerely thank our Executive Director and all of the

members of his staff for another job well done for the past year.

I feel that this has been another very active and very good year for the Kentucky Medical Association. Our dedication to those words in the Preamble of our Constitution are always foremost in our mind and that is to "bind together for the best interest and improvement of health care for our citizens of the Commonwealth of Kentucky."

S. Randolph Scheen, M.D., Secretary-Treasurer

Recommendations, Reference Committee No. 1

This Reference Committee has reviewed the Report of the Secretary-Treasurer. We note with interest that the decision to combine the offices of Secretary and Treasurer has proven to be a wise move on the part of this House of Delegates. We further note with approval the sound financial status of the KMA and offer our sincere appreciation to Doctor Scheen for his work on our behalf.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Editor

The function of a journal in an organization like KMA is an interesting one, and reflects various needs of the organization it serves. There is an obvious need for internal communications, and dissemination of organizational information, which probably represents one of the major reasons for this journal's being. Now, with medicine increasingly being pushed into an adversary position with regulatory bodies of many bureaucratic sorts, it is of prime importance that we become organizationally unified and strong. Without a strong voice available to the organization, such as *The Journal,* we will have little chance at such unification, and vital information exchange will be made more difficult.

In addition to the internal function, however, a journal of this sort reflects our medical organization, and the individuals within it, to those in the "outside world" to whom the journal passes. Admittedly, these are not large numbers of individuals or organizations, but those who wish to sample the opinions and the internal climate of the KMA are aware that this journal offers them such an opportunity.

The presentation of scientific information, generated by Kentucky physicians, is of interest to Kentucky physicians, underlies the other functions noted above. We have been continually blessed with presentation of articles by authors with information of value to present, and we appreciate their continued interest in our *Journal.*

Economically, this past year has been about equal to several previous ones, in that the increased cost of doing business has not been matched by increased revenues; it is of some interest, however, that the actual cost of *The Journal* deficit runs about $10.00 per member per year now, whereas it ran approximately half that ten years ago. In view of the inflation of the times, we on the Editorial Board submit that the record is not quite so dismal as it seems. We still feel strongly that *The Journal* represents an article of great value to the individual physician member of KMA.

As of this September there will be changes in the Editorial Board, with the Editor stepping down, and a new Editor, as yet undesignated, replacing him. It has been a most pleasant and valuable time for this Editor during his years on this board; I have learned much, and appreciate the many opportunities this position has offered for communication with my most intelligent and interesting peers! Many thanks to all of our loyal Editorial Board, and to the Staff, with a special reference to Mrs. Diane Maxey, who has continued her usual high level of performance in her job as Assistant Managing Editor.

Walter I. Hume, Jr., M.D., Editor

Recommendations, Reference Committee No. 1

The Report of the Editor has been reviewed by this Committee. We wish to thank the Editorial Board for its fine efforts during the past year. We further wish to express our appreciation to Doctor Hume for his outstanding leadership as Editor of *The Journal* for the past several years.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Delegates to AMA

The House of Delegates of the AMA has met on two occasions since our last report—in Honolulu, Hawaii, on November 29-December 3, 1975, and in Dallas, Texas, on June 22-July 1. Many weighty matters received hours of concerned deliberations.

The preceding year, the Delegates heard reports of dire financial straits from AMA officials, but one year later the House commended its Trustees for the "superbly concise and succinct presentation of the fiscal plans of the Association, made possible by the newly-applied approaches to zero-based and program budgeting."

Presentation of Awards

Distinguished Service Award—Representative Paul Rogers (D), Florida, won the AMA citation of the Layman for Distinguished Service. Representative Rogers is Chairman of the Subcommittee on Health of the House Committee on Interstate and Foreign Commerce.

Report of AMA President

AMA President, Max H. Parrott, M.D., told Delegates at the Clinical Convention in Honolulu that recent public criticism of physicians as self-interested professionals indifferent to their patients has caused many to feel alienated and unfairly put upon. The apparent intent of the growing assault upon the individual physician "is not to admonish," Doctor Parrott said, "but to discredit us in the eyes and ears of our patients."

The public's verbal attacks on physicians, which Doctor Parrott noted, "have been gaining in frequency and ferocity," contain two basic charges: "that we physicians are indifferent to the patient and that we are motivated by self interest."

"The first charge," Doctor Parrott said, "has helped spur many of the malpractice claims lodged against

physicians; the second has resulted in claims of unnecessary surgery."

In refuting the two charges as being "false conclusions from obvious facts," Doctor Parrott urged the physicians to work for a good relationship with their patients and to broaden their professional relationships.

"Not to do so," he warned, "is to risk the dividing and conquering of medicine."

Doctor Parrott called for the development of the doctor-patient relationship, not only to physicians, but in arguments on Federal legislation and regulation, for that rapport is the very essence of the system of care that we are trying to preserve.

Additionally, he noted, "ample evidence exists that a good relationship with our patients is the best single defense against professional liability claims."

Doctor Parrott called for the development of the warm relationship with patients to nullify the charges of indifference and a broad professional relationship, which, when properly directed, will do much to annul the charge of self interest.

Summary of Actions of the House of Delegates

Catastrophic Coverage—The House of Delegates turned back an attempt to withdraw support from the AMA-sponsored national health insurance (NHI) plan, but agreed to work for a private sector catastrophic health insurance program with the insurance industry. A state delegation, with support from several other Delegates, attempted to withdraw support from HR 6222, the AMA-sponsored health insurance plan, based on voluntary coverage from private insurance firms. The argument used by those Delegates was that most physicians were opposed to any form of national health insurance. Many delegates agreed, but said that the AMA strategy should be to support an acceptable plan to help defeat mandatory, Federally-funded proposals.

In a similar action, the Delegates accepted a Board of Trustees report outlining the AMA's efforts to support HR 6222 and resolved to make it clear in a public announcement that the AMA's NHI plan is based on the voluntary purchase of private sector insurance plans. In addition, the AMA went on record as being strongly opposed to the National Health Planning and Resources Development Act, passed by Congress in 1974.

The Delegates approved a Board report outlining AMA attempts to have the Act modified administratively or in Congress, and the AMA's willingness to sue the Government over the law if all other attempts fail.

AMA Reorganization Plan Defeated—The delegates heard a report of the AMA Council on Long Range Planning and Development, which called for fundamental and far-reaching changes in the AMA. The report was greeted coolly by the Delegates with the majority of the report being sent back to the Committee for further study.

In a series of 21 recommendations, the Council on Long Range Planning and Development had argued for changes making the state medical societies—and not the individual M.D.—the basic AMA membership unit providing the formula for representation in the House so that essentially the larger states would lose Delegates while the smaller states gained, as would the specialty societies, house staff and students; creating a new category of affiliate membership for the national medical specialty societies and "other" physician organizations; and cutting back to eight standing councils that would report to the Board.

The House directed that the AMA will remain a federation of state medical societies; that proportional representation be maintained; that the specialty section councils be retained; and that the eight standing councils report to the House, not to the Board.

Liability Insurance Efforts Expanded—The House heard a report from the Board of Trustees outlining steps in AMA's continuing campaign to improve the medical liability climate. The AMA has received approval to incorporate a national reinsurance company in Illinois. Should it be necessary to activate the company, $2 million in capitalization and surplus will be required.

The AMA will start a major public and professional communications campaign in 1976, aimed at improving the medical liability climate.

The Delegates heard a report that the continuing drive toward significant tort reform had been successful and that more than 150 tort provisions had been enacted by 35 state legislatures this past year. In addition, the AMA will continue to explore alternatives to the court system for resolving differences. Arbitration is one of these, and the AMA and other groups are studying its effectiveness.

Medical Education—A considerable amount of discussion was held at the Clinical Meeting concerning medical education, physicians's house staffs and other related items. The House reaffirmed its opposition to conscription or coercion of physicians to practice in medically-underserved areas. The House also asked state and local medical societies to work with appropriate local health planning bodies to assist rural communities in a logical service area to coordinate and share their health resources on a regional basis.

It was reported that nationally, the number of physicians in primary care specialty training programs now exceeds the portion currently practicing in such specialties. The Board concluded that basic demographic, economic, and social forces are the chief determinants of physician distribution—not the temporary introduction of trained personnel in sparsely-populated areas.

During the Clinical Meeting, the House of Delegates adopted a Coordinating Council on Medical Education statement on the subject of foreign medical graduates. The report essentially recommends parity of treatment for FMGs and graduates of U.S. medical schools, while recommending that this Country not rely on FMGs to solve its manpower distribution problems. The report also recommends that all medical school graduates, whether foreign or U.S., have two years of approved graduate training before they can be eligible for state licensure. The report further recommends that the national control on accreditation of graduate medical education problems should be in the hands of the Coordinating Council and Liaison Committee on Graduate Medical Education.

Legislative Activities—The AMA's legislative action efforts will be expanded to include participation by state

and county medical societies following adoption of a resolution by the House of Delegates. The resolution asked AMA to set up a liaison system to keep state and county societies informed of important pending legislation.

State and major county societies are likewise urged to appoint staff members to work on a national legislative action so that members can help testify and lobby on behalf of AMA physicians.

In other matters relating to legislation, the House of Delegates:

Approved a Board of Trustees report seeking changes in the PSRO laws to permit "slot" election of PSRO directors, rather than at-large elections. The Board and the Council on Legislation reported that the changes could be made administratively rather than by Congressional amendment;

Reaffirmed its opposition to the entire PSRO law and urged active attempts by the AMA and state societies to get it repealed or amended;

Accepted a Board report outlining the AMA's efforts to introduce legislative reform in the Administrative Procedures Act;

Referred to the Board a medical student-backed proposal to seek funding for the teaching of geriatrics in medical schools.

Elections—Delegates elected John H. Budd, M.D., Cleveland, Ohio as President-Elect. Others elected or re-elected to positions in the Association were:

Vice-President—Francis T. Holland, M.D., Florida

Speaker of the House—Tom E. Nesbit, M.D., Tennessee (re-elected)

Vice-Speaker of the House—William R. Rial, M.D., Pennsylvania (re-elected)

Trustees—Lowell Stein, M.D., Indiana, and Frank Jirka, M.D., Illinois, were both re-elected to terms on the Board, while Hugh A. Ritter, M.D., Missouri, and John J. Coury, M.D., Michigan, were newly elected to the Board.

Inaugural Address

The Government "has made itself a rigid custodian of the people's common hopes and horizons," charged Alexandria, Virginia, physician, Richard E. Palmer, M.D., at his inaugural ceremony. The newly-installed President warned that the Federal Government is the biggest threat to the medical profession and urged all physicians to unite in the AMA for their own protection.

Doctor Palmer noted that the Federal Government, having made itself the "chief arbiter of what is desirable" by now has shown that "it is far less adept in realizing impossibilities than in stimulating desires." He counted off failures and mistakes in Federal and Congressional actions regarding medicine, including the ill-fated utilization review regulations, the Health Planning and Resources Development Act, the House report on "unnecessary surgery," and the Federal Trade Commission anti-trust charges against the AMA.

"Instead of settling for a reasonable adjustment to medical realities," he said, "Government is becoming steadily more dogmatic. The only way to combat Federal intrusion into medicine," he said, "is for physicians to unite behind the AMA in its efforts on behalf of the profession and of quality medical care."

Financial Position—The House of Delegates commended the AMA Board for its outstanding service in elevating the Association from the financial morass into which it had plunged in late 1974. The AMA currently has a full dues-paying membership of 144,107, which is in close range of the 144,500 figure upon which the 1976 AMA budget is based. The Board urged strong efforts to recruit the additional members by year end and said this would allow the AMA to apply about $10 million to its liquid reserves in keeping with the Association's determination to replenish its reserve as directed by the Delegates at the 1975 Annual Convention when dues were increased to $250.

Delegates retained the $250 annual dues, rejected the resolution that dues be paid in installments, and approved the 1976 AMA plan, as developed by the Board and the Council on Long Range Planning and Development. The House also authorized AMA to continue to promote the concept of unified membership. A proposal to establish lifetime membership within the AMA was rejected.

Professional Liability Insurance Matters—The House expressed its concern about the Medical Liability Commission's plans to engage in lobbying and political activity and directed AMA representatives on the Commission to seek immediate changes in Commission By-laws.

The House also encouraged state medical associations to give appropriate assistance to physicians involved in countersuits to non-meritorious medical liability suits. Both Illinois and California state medical societies were cited for their support of physicians involved in such suits.

Living Will Concept Opposed by Delegates—The House considered and ultimately rejected a change in policy that would have recognized the right of patients to have a "living will." A proposal by the New Jersey delegation offered restatement of the AMA policy that the use of extraordinary life-sustaining measures was a moral decision between patient and physician. However, the proposal included a phrase that would have recognized the right of the patient to express, orally or in writing, his own wishes concerning use of extraordinary life-sustaining measures. The Delegates voted down the New Jersey proposal after it was pointed out that the language will provoke more intrusion by the legal profession. The Delegates agreed to a provision that the decision of when death occurs and who should decide whether extraordinary measures should be continued in "hopeless cases" did not belong to either state legislatures or courts. It was pointed out that in the past year, 20 state legislatures had considered statutes that would define death for legal purposes, and it was felt a strong AMA statement against legislative definitions was needed.

Professional Standards Review Organizations—The House turned down a resolution calling for the AMA to assist 13 state medical societies in breaking contracts of state-wide professional standards review organization support centers. The Board of Trustees had expressed support for continuing funding of the state-wide support centers, at the request of the state societies, the reference committee noted. That request was made so the societies could continue assistance to the implementing of appropriate PSRO programs.

In another PSRO-related matter before the House, a resolution calling for the establishment of an ad hoc committee of the Council on Medical Services to parallel its existing Ad Hoc Committee on PSRO to represent physicians where PSROs had not been formed and assist them in establishing a unified PSRO was defeated.

AMA Council System Revised—The House approved Bylaws changes establishing size, composition, and continuation for eight standing councils of the AMA. All other AMA councils will be appointed on an ad hoc basis and carry a specific phase-out date.

The streamlining of the Association's sprawling council-committee structure is an outgrowth of the fiscal crisis from which the AMA has extricated itself and apparently ends the tug-of-war between Delegates and the Board over which will control the councils. Both House and Board are granted ample supervisory authority under the new set-up.

In addition to restructuring the AMA council system, the House of Delegates handled several minor Bylaws matters. The most important was a reorganization of the interns and residents business section. The new structure, to be renamed the resident-physician section, provides for a seven member governing council and for representation to the residents' annual business meeting to be chosen on the basis of one delegate per 100 members. Resident members of state associations offering full membership to residents will elect their own delegates; resident physicians who are direct AMA members will have their delegates elected by the governing council from among those who seek delegate status.

The aforegoing information is only a resume of the action taken by the House at AMA at its 1975 Clinical Convention and 1976 Annual Session. Full information is available to you through the KMA Headquarters Office.

Along with the entire AMA Delegation, I would like to thank the KMA officers for their help in the organization and report of this year's activities of the AMA House of Delegates to the KMA membership.

J. Thomas Giannini, M.D., AMA Delegate

Recommendations, Reference Committee No. 1

The Report of the Delegates to AMA was reviewed with interest by this Committee and we wish to commend them for their hard work on our behalf.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Executive Director

As our complex society continues to increase its focus on health and medical care issues, the profession encounters seemingly endless confrontations, each of which must be met squarely and dealt with as expeditiously as possible. Complex changes in clinical and organizational matters also present a supreme challenge at all levels of the medical federation. The Board of Trustees, Officers and KMA staff must direct their energy to each of these areas of concern without decreasing the attention and effort dedicated to continuing problems and programs.

This has never been more true than in the past year. The Kentucky General Assembly was of major importance to KMA. Activities in preparation for the General Assembly began more than a year prior to its call to order. KMA was represented at each appropriate Interim Committee session. Testimony on the hundreds of legislative proposals which could affect medicine had to be developed, researched, written, and presented. Contact with Legislators and the Administration had to be developed and maintained as did liaison with allied organizations. Key Men were asked to serve, and a communications system was implemented.

Even with this amount of preparation, your Officers and members of the Legislative Activities Committee devoted long, hard, and often frustrating hours on behalf of their colleagues and their patients. Staff shouldered the burden of a legislative session that not only presented the challenge of a "normal" complement of health-related issues, but had the added weight of the Professional Liability Insurance Act as well, one of the most important bills dealt with by the Legislators.

The 90th day of the legislative session ended with KMA "winning" more than 85 percent of the issues on which it took positions.

A great deal of attention was directed throughout the year to the national legislative scene. Federal regulations and proposed legislation were reviewed daily by staff, and written testimony was submitted on numerous occasions. Contact with U.S. Congressmen involved in key bills was initiated. Relations were maintained with Kentucky's Congressional Delegation through written correspondence, almost weekly telephone calls, and three separate trips to Washington.

The issues having the greatest potential for continuous and far-ranging effects on the medical profession are Federal medical care programs. Staff kept abreast of current issues and seemingly day-to-day changes in such Federal programs as Medicaid, Medicare, HMOs, PSRO, and many others. The National Health Planning and Resources Development Law, which creates Health Service Areas and Health Systems Agencies, is daily monitored and reported on by staff and is only one example of staff involvement with this type program. On KMA's behalf, staff took part in meetings at the local, State and National levels on Health Systems Agencies and has pursued every nuance of this law and its various interpretations. One staff executive serves on a national advisory committee on HSA affording us timely information.

A number of "new issues" internally created still more increase on staff time demands. Podiatry, optometry, the Council on Public Higher Education, health care costs, and an overview of peer review activities, which was interrelated with the Judicial Council, the Claims and Utilization Review Committee, Committee on Physicians' Health, and the Board of Medical Licensure, are just some of the eight special ad hoc committees of the Board appointed this year.

Other concerns which assumed greater importance, particularly this year, were routine peer review activities, the continuing medical education program, and working with the office of the Commissioner of Insurance to implement the liability insurance legislation. In addition, routine but time-consuming matters were conducted, such as preparation for the Annual Meeting and preparation

for and conduct of other special meetings, such as the Seminar on Occupational Health, Patient/Public Relations Seminar for Medical Assistants, Emergency Health Care Seminar, Seminar for New Physicians, and Seminar on Long-Term Health Care. KMA staff worked with some 60 committees; handled an ever-increasing mail and correspondence load; coordinated efforts with outside groups and allied organizations; worked with specialty groups; and saw to the day-to-day needs of the membership.

Overall increased activity required the installation of a new telephone system in the Headquarters Office to maintain appropriate communication with the membership. Our printing shop seems to double its output each year. Still, communication seems to be an eternal problem. Finding a method of informing the membership of KMA's day-to-day activities remains an ongoing challenge.

Just as medicine must maintain a flexible posture to deal with ever-changing and complex matters, so must staff remain flexible to cope with these many diversified challenges. Although each staff person has routine assignments, newer responsibilities must be shifted as the issues dictate. As new or changing major issues are encountered, this shifting of duties is done to best meet the needs of the moment, as well as the best long-term needs of the Association. As an example, a Frankfort office was opened during the General Assembly to handle day-to-day priorities. After the legislative session was over, continued involvement in legislative matters had indicated a need to maintain this office at the State Capital to represent and serve the membership.

Having served this past year as a member of a fifteen-person team to make a week-long study of the British Health System, I felt I experienced the most thorough and intense learning experience possible. The American public, in my opinion, would never tolerate medical care delivered in such a fashion as is done through the British National Health Service. Staff hopes to accelerate its own efforts in informing the public of the valuable assets it has through private medical care and the dangers of government medicine. From my England experience, it appeared that physician involvement in every process; i.e., planning, organization, delivery, mechanisms, etc., is essential as some of England's problems apparently stemmed from a lack of physician input as the physicians met closed doors from the "health planners." Some aggressiveness to elude such a fate seems most necessary.

It doesn't seem appropriate to attempt to delineate all of staff's activities for the Associational year. Obviously, the fact that staff planned, serviced, implemented actions and/or represented KMA at more than 200 meetings through our committee structure or with allied groups speaks for itself when one considers the time involved in planning for such sessions and follow-up activity, especially when some of the meetings are a week long.

In my judgement, no one could have asked for more than was given by staff this year. While we had as many as four positions vacant most of the year, more was done than ever before. As far as production is concerned, we saw the greatest output in KMA history, and in quality, I feel the staff cannot be surpassed. Collectively, they worked together with a thoughtful, harmonious spirit and with great dedication to medicine in Kentucky.

On staff's behalf, we express our gratitude for the opportunity of working for you, the physicians of Kentucky. It is a privilege to serve this House of Delegates, and to the Board members and committee members who give us daily guidance, a special thanks is extended. We hope each member will visit his Headquarters Office whenever the opportunity presents itself.

Robert G. Cox, Executive Director

Recommendations, Reference Committee No. 1

The Report of the Executive Director has been reviewed by your Reference Committee. We wish to once again offer our sincere gratitude to Mr. Cox and the staff of KMA for their dedication throughout the past year on behalf of the Association.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Advisory Committee to the KMA Auxiliary

A review of the Report of the President of the Auxiliary provides an excellent picture of their many areas of active, effective concern and interest. One cannot fail to be impressed with the accomplishments of the Auxiliary and the dedication of its officers and members.

We noted with interest the recent name change from Woman's Auxiliary to Auxiliary to the KMA and certainly commend this progressive move which is parallel to that of the AMA.

Our sincere congratulations are extended to the Auxiliary, and particularly, its officers for their achievements, but more importantly, we would like to thank them for their many efforts in our behalf.

We urge all physician's spouses to join and become active in the Auxiliary and lend their support to this vital segment of organized medicine.

Hoyt D. Gardner, M.D., Chairman

Recommendations, Reference Committee No. 1

The Report of the Advisory Committee to the KMA Auxiliary was reviewed by this Committee.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Resolution O

Jefferson County Medical Society

WHEREAS, in these complex and difficult times, there are many important subjects discussed at the County or State level in medicine which require the best possible understanding among all physicians. This may be illustrated in the last one to two years concerning such subjects as KHSA-W, CME, KPRO, SB 248, and others, and

WHEREAS, the duly elected Presidents and Presidents-Elect in each County throughout the State are the

best informed and sensitive to the feelings of all physicians at the "grass roots" level, and

WHEREAS, the daily work of a County Medical Society President requires him to be better informed and more aware of membership feelings than does the work of a KMA Trustee, especially if that Trustee has many more physicians in his district than can be adequately represented, and

WHEREAS, an occasional meeting of a **County Society Presidents' Committee** with the KMA President, President-Elect, and Board Chairman, would be of great value to the KMA in preparing for projects and programs requiring complete membership understanding and support, now therefore be it

RESOLVED, the Kentucky Medical Association House of Delegates instruct the Board of Trustees to work in cooperation with the KMA President asking his approval to appoint and use a **County Society Presidents' Committee.**

Recommendations, Reference Committee No. 1

Resolution O was reviewed by the Committee and some discussion was heard on its behalf. This Committee recommends the adoption of Resolution O.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

Resolution S

KMA Board of Trustees

WHEREAS, KMA has provided envelope addressing service for a number of years without questioning the contents to be mailed, and

WHEREAS, substantial reasons for avoiding involvement in certain situations related to addressing services for the protection of KMA have been indicated, and

WHEREAS, KMA has been put in a position where much time and effort is expended in some instances addressing envelopes used for the distribution of anti-KMA information, therefore be it

RESOLVED, that all materials to be mailed in KMA-addressed envelopes be subject to review by the Executive Committee of the Board of Trustees if warranted for the protection of KMA, and be it further

RESOLVED, that no envelopes for outside organizations, members, or non-members be addressed to be used to distribute material that is contrary to stated KMA policy without the specific consent of the Executive Committee.

Recommendations, Reference Committee No. 1

A representative of the Board of Trustees presented testimony of the Board's support of Resolution S. No testimony was heard against this resolution. This Committee recommends acceptance of Resolution S.

Mr. Speaker, I move the adoption and implementation of this section of the report.

The motion was seconded.

A motion was then made and seconded from the floor that the "Resolved" portions of Resolution S be deleted and the following be added, "RESOLVED, that KMA equipment and personnel may not be used for addressing envelopes for outside organizations without KMA Executive Committee approval. The use of KMA addressing equipment and personnel will be available to KMA members at their own expense."

On a call for the vote, the motion passed as amended.

Mr. Speaker, I move the adoption of the Report of Reference Committee No. 1 as a whole, as amended.

(The motion was seconded and carried.)

Mr. Speaker, as Chairman of Reference Committee No. 1, I would like to express my thanks to each of the Committee members for their help in preparing this report and to Mrs. Jean Wayne for her excellent help and indulgence during its preparation.

REFERENCE COMMITTEE NO. 1
Don E. Cloys, M.D., Richmond, Chairman
Franklin K. Belhasen, M.D., Paintsville
Kenneth M. Eblen, M.D., Henderson
Arthur H. Keeney, M.D., Louisville
John E. Trevey, M.D., Lexington

REFERENCE COMMITTEE NO. 2

Harold D. Haller, M.D., Louisville, Chairman

Reference Committee No. 2 considered the following reports and resolutions:

13. Report of Scientific Program Committee
14. Report of Scientific Exhibits Committee
15. Report of the Continuing Medical Education Committee
16. Report of the Cancer Committee
18. Report of the Hospital Committee, with the following *exception*: Page 18.1, paragraph three, pertaining to the cost awareness plan
37. Report of the Emergency Medical Care Committee
38. Report of the Interspecialty Council

Resolution J—Opposition to Continuing Medical Education Tied to Licensure (Pennyrile Medical Association)

Resolution L—Mandatory Continuing Medical Education Tied to Licensure (Jefferson County Medical Society)

Resolution T—Mandatory Continuing Medical Education as Endorsed by the Kentucky Medical Association (Clark County Medical Society)

Report of the Scientific Program Committee

The KMA Scientific Program Committee met this year in November to plan the scientific program for the KMA Annual Meeting. Since that meeting, ten months of hard work have been put in by your committee and staff in coordinating the program.

In December, your Chairman met with the Specialty Group Presidents to discuss their participation in planning the scientific session. The scientific programs of the specialty groups held in conjunction with our general

session have proven to be valuable and we feel provide an excellent contribution to the continuing education of our members.

I am extremely appreciative for the excellent cooperation in planning the overall meeting that we always receive from the specialty groups.

This year will be the fourth year that the meeting will be held at the Ramada Inn, Bluegrass Convention Center. Those attending KMA's Annual Meeting the past three years have been enthusiastic about returning to Ramada's pleasant surroundings. The Scientific Program Committee's objective is to present an appealing and educational program that will provide maximum benefits to the members of KMA. Providing this educational program in a pleasant atmosphere is helpful.

It has been the Committee's experience that the selection of themes for portions of the scientific program have proven to be beneficial and that policy has been carried over into this year's session. Themes are designed to maintain continuity of the program and afford an opportunity for indepth coverage of the subject. Themes being used this year include "Emergency," "Breast Problems," and "Infectious Disease."

This year's program will be comprised of individual presentations and a panel discussion. The Committee members and specialty groups have gone to great lengths to bring in some of the country's outstanding speakers. We are proud of the fact that the KMA Annual Meeting Scientific Program is one of only four or five in the entire United States which has been accredited for continuing education by the American Medical Association. It also receives credit from the Kentucky Academy of Family Physicians.

This year, as in the past, the South Central Bell Telephone Company is sponsoring the message center in the Technical Exhibit Hall. This continues to be of valuable service to our Association Membership and we are extremely grateful for it.

I appreciate the efforts of those who assisted in the formation of this program and would like to give a special note of appreciation to the Committee members, Specialty Group Presidents, and Specialty Program Chairmen.

Any suggestions the membership might have for future programs will certainly be very welcome.

Richard F. Hench, M.D., Chairman

Recommendations, Reference Committee No. 2

The Reference Committee commends the Scientific Program Committee for the outstanding program this year. The Committee wishes to express its thanks to the South Central Bell Telephone Company for sponsoring the Message Center again this year.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Scientific Exhibits Committee

The Committee on Scientific Exhibits meets late in the Associational year in order to review the applications for scientific exhibit space at the Annual Meeting. As a result, it has been customary for the Committee to submit a final report prior to the meeting to make sure that it will be included with all committee reports presented to the House of Delegates.

This year we hope to have approximately 15 exhibits, which will be located along the entrance to the General Assembly Hall in the Bluegrass Convention Center. The scientific exhibitors will be available to discuss their exhibits and will have special badges and ribbons to identify themselves.

Exhibitors will receive a certificate for participating in this phase of continuing medical education. Our Committee feels that the scientific exhibits are a valuable contribution to postgraduate physician education and is hopeful that everyone attending the Annual Meeting will visit these exhibits.

Richard A. Kielar, M.D., Chairman

Recommendations, Reference Committee No. 2

The Reference Committee expresses thanks to the Scientific Exhibits Committee for the high quality of scientific exhibits and wishes to encourage more scientific exhibit participation. The Committee feels that the scientific exhibits are a great asset to postgraduate physician education.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Continuing Medical Education Committee

With the increasing attention being given to physicians' continuing education, not only by the profession, but by the public as well, the Committee projects that its activities will increase, particularly in the area of accreditation of local CME programs. In October, 1975, the Committee was particularly gratified to conduct its first accreditation site visit, which represented the culmination of considerable efforts involving our Committee, the House of Delegates, Board of Trustees, and AMA.

The accreditation visit was made to the Louisville Area Continuing Medical Education Consortium, a cooperative effort between the Jefferson County Medical Society, several Louisville hospitals, and the Department of Continuing Education of the University of Louisville. It was the Committee's feeling that a very unique educational program had been developed and the Committee would encourage other groups to investigate this method of developing CME opportunities. On the basis of the accreditation visit, the Consortium was granted accreditation. KMA is authorized to accredit CME programs by the AMA Council on Medical Education, and operates by fairly formal guidelines developed by the AMA. One of the guidelines requires that KMA develop a satisfactory accreditation process and, based on the survey of the Consortium, this process received full approval by the AMA, which enables KMA to perform accreditation surveys for four years.

This year the AMA gave notice of a new level of

accreditation, in addition to the existing five. The six levels of accrediation are as follows:

1. **Accreditation of the Institution or Agency.**

2. **Accreditation of the Institution or Agency Contingent upon Stipulated Changes in the Program.** Program does not meet the requirements for accreditation but does seem to have the potential for doing so, for a limited time only, and a resurvey should be made within a stated period of one or two years.

3. **Provisional, or Preliminary, Accreditation of the Institution or Agency.** For programs being planned or in development and should carry a time limit of one or two years.

4. **Accreditation Only of Certain Courses within an Institution or Agency Rather Than of the Entire Institution.** Where courses given by one department or branch are of high quality and those given by another area in the institution are not of satisfactory quality.

5. **Non-Accreditation of the Institution or Agency.** Reasons must be given.

6. **Probationary Accreditation of the Institution or Agency for a Period of One Year.** A previously accredited institution with its accredited status in effect, shall have developed a deficiency of sufficient degree that accreditation would be jeopardized without corrective action within a reasonable length of time, and a resurvey would be necessary within approximately one year.

A concern of the Committee has been that many groups have interpreted the accreditation process as being too formal, too restrictive, and one which omits some routine activities that, in hospitals for example, may be of educational value. The Committee would agree that the route to accreditation may be difficult to achieve, but the Committee is obliged to follow this process in order to retain accreditation authority from the AMA and to insure the quality of programs accredited. However, the Committee is readily prepared to reasonably modify the program or its requirements to make educational offerings more easily available. As a part of this work, the accreditation application is being revised to make it simpler and less duplicative. In addition, the Accreditation Subcommittee is prepared to work with any group on preparing an application or forming a program, and we would like to acknowledge the efforts of the Departments of Continuing Education at the University of Louisville and the University of Kentucky for their very fine efforts in this area, also.

A liaison representative of the Committee was named to work with the Board of Medical Licensure in drafting necessary language to effect the individual continuing education program. Two of our Committee members also served on a special study group that worked on trying to standardize the requirements and to develop exceptions.

Other areas of activity of the Committee were the periodic publication of a CME news page in the *KMA Journal*, the selection of recipients of the KMA Faculty Scientific Achievement Award from nominations sent by the medical school deans, and planning for a medical education conference to be held during the first part of the year.

A good deal of thanks is owed to the members of the Accreditation Subcommittee who pioneered "new ground" and who spent much time over and above regular committee work in helping to implement the accreditation system.

R. Glenn Greene, M.D., Chairman

Recommendations, Reference Committee No. 2

The Reference Committee reviewed and approved the report of the Continuing Medical Education Committee and wishes to commend it for its efforts. It was felt by the Committee that more study should be directed toward the increasing cost of medical education and the role and obligation of the medical centers in providing this.

Mr. Speaker, I recommend the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

Report of the Cancer Committee

During the past year the Committee has met at two- or three-month intervals. The project to have all women above the age of 20 in the Commonwealth have a Pap smear continues increasing impetus. This has been publicized widely, especially through the efforts of the cooperating American Cancer Society. It is believed that many more women have had tests performed this year. At this time, tabulations are not available. This unrelenting drive will continue. The efforts of the Kentucky Department for Human Resources and the cooperation of the American Cancer Society are, indeed, appreciated. Any woman who cannot or will not visit her physician may have a smear made at the County Health Department. All positive or suspicious reports are sent to her physician for definitive care.

The progress of the Cancer Centers, both at the University of Kentucky and the University of Louisville has been observed with interest. They have not yet reached fruition. The different approach of the McDowell Cancer Network in Lexington is not yet active and its avenues of approach are not yet clear to the Committee. As further developments occur, the Committee will continue to study and encourage these activities that appear in the best interest of the cancer patient.

The Committee has recommended the publication of one-page reports in the *KMA Journal* for information which relates to specific cancer problems. These have included articles on the University of Louisville Cancer Center, Pap smears, endometrial cancer, thyroid cancer after radiation, cancer education, Laetrile, and mammography. Other one-page articles in the future are intended to be informative and offer opinions for consideration. It is hoped if these are of sufficient interest to the members of the Association, the Editors will continue to accept those articles which they may deem worthy.

The KMA Cancer Committee has a prime function of cooperation with the two universities and the various cancer activities carried out by volunteers, private groups, and governmental programs in the Commonwealth. These include the Department for Human Resources, American Cancer Society, the University of Kentucky, the University of Louisville, the Nursing Associations, and the Kentucky Hospital Association.

The Committee will continue to meet at two- and three-month intervals and will be pleased to consider any subjects which may be presented by members of the Association.

Laman A. Gray, Sr., M.D., Chairman

ADDENDUM

At the final meeting of the KMA Cancer Committee it was agreed to recommend to the KMA Board of Trustees that KMA institute an award for outstanding work in cancer. This award could be presented annually, if appropriate, or whenever a suitable recipient is recommended. Nominations could be made for possible candidates through the Cancer Committee to the Awards Committee. It was suggested that the award be known as "The KMA Cancer Service Award". The Committee further recommended that Col. Charles E. Tucker, Executive Vice President of the Kentucky Division of the American Cancer Society, who will retire in October of 1976, be the first recipient of this award for his work in the field of cancer service.

Recommendations, Reference Committee No. 2

The Reference Committee endorses the Report of the Cancer Committee and commends it for its efforts. The Reference Committee would like to recommend that a letter of commendation be sent to Colonel Charles E. Tucker, the Executive Vice President of the Kentucky Cancer Society, for his long and continued work in this field.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

Report of the Hospital Committee

The Kentucky Medical Association Hospital Committee met on March 25, 1976, with good attendance.

Several of the Committee's ongoing activities were discussed in detail and it is the feeling of the Committee that they should continue. Particular reference was given to the efforts of the Dry Run Teams. This program has been in effect since 1962 and is a service available to hospitals seeking accreditation for the first time. Experienced physicians, hospital administrators, medical records librarians, and nursing service supervisors put on a "Dry Run" accreditation visit, the purpose of which is to indicate areas of weakness that should be corrected in the facility prior to the actual accreditation visit being made.

One area that the Hospital Committee became involved with this year was a request from the Executive Committee of KMA to discuss the development of an appeals mechanism which could be used by physicians who for one reason or another lose their hospital staff privileges.

The Committee actually discussed two things: one was appealing through the hospital setting to the medical staff and Hospital Board of Trustees. The second was if KMA, as the physician's professional organization, should provide a committee or other mechanism where an additional appeal from the physician could be heard. Since, in most cases, the Hospital Board has the final say on staff privileges, this committee would function only in an advisory capacity.

Regarding the internal mechanism, the Hospital Committee learned that the Joint Commission on Accreditation of Hospitals had developed a model appeals mechanism which could be made a part of medical staff bylaws. However, the Committee feels that the guidelines are complicated and perhaps would not be used by small hospitals. Thus, the Committee appointed representatives to work with the Kentucky Hospital Association to simplify the model and make it suitable for use in smaller hospitals.

The Committee also reviewed guidelines developed by the Greater Cleveland Hospital Association to be used in the treatment of suspected rape victims. The Committee felt that it would be worthwhile for a copy of these guidelines to be circularized to Kentucky hospitals and suggested that KHA investigate the feasibility of doing so.

The Chairman wishes to thank the membership of this Committeee, and the representatives from the Hospital Association who have met with us for their help and participation.

Royce E. Dawson, M.D., Chairman

Recommendations, Reference Committee No. 2

The Reference Committee reviewed the Report of the Hospital Committee with the exception of paragraph three, page 18.1, and trusts that they can find an appeals mechanism that will be applicable to all physicians in all hospitals in this Commonwealth.

Mr. Speaker, I move the adoption of this section of the report.

(Motion was seconded and carried.)

Report of the Emergency Medical Care Committee

The largest endeavor of the Emergency Medical Care Committee again this year was to plan and implement the Sixth Annual Emergency Health Care Seminar which was held June 2-3 at the Executive West Hotel in Louisville. This meeting continues to enjoy good attendance and 386 people registered for the meeting this year.

One of the highlights of this year's meeting was that one afternoon was devoted to the presentation of the Basic Life Support Program given by the American Red Cross. The program was given in such a way as to enable participants to become certified in basic life support upon successful completion of the practical training. The Committee is deeply indebted to the many volunteer instructors who participated in presenting the course. Response to that segment of the program was extremely favorable and has led to some discussion about the possibility of having more time devoted to this theme next year.

The Committee is also indebted to the number of physicians from around the state who gave freely of their time to come and serve as faculty members on the program. The small registration fee charged by the Committee in putting the program together covers the cost of meals and other promotional expenses and enables us to allow many people to attend.

We were pleased to have, as featured luncheon speakers, Marshall B. Segal, M.D., J.D., of Chicago, and Doctor Charles E. Lucas, Director of Emergency Services at Detroit Receiving Hospital. Both of these physicians made outstanding contributions to the success of the meeting.

This year we were again to have the Military Assistance to Safety and Traffic Units display with us. However, inclement weather prevented their attendance. Kentucky is fortunate to have two air ambulance services operating and the Committee has been impressed with the professionalism shown by the Army in setting up and implementing the service. However, we were somewhat disappointed in some of the policy changes implemented recently by the Fort Knox Unit. Members of the Committee, as well as other interested individuals, met with officials of Fort Knox in an effort to discuss and, hopefully, solve the problems leading to that policy change.

This year's program was accredited for continuing education credits by the American Medical Association; Kentucky Chapter, American College of Emergency Physicians; the Kentucky Academy of Family Physicians; the Kentucky Dental Association; the Kentucky Nurses Association; the Kentucky Association of Licensed Practical Nurses; the American Registry of Emergency Medical Technicians; and the American Association of Radiologic Technologists. The Committee enthusiastically recommends that the Emergency Health Care Seminar be continued in the future and that the KMA Emergency Medical Care Committee be the coordinating agency.

This year the Committee was surprised to find that after six years of presenting the Seminar, another similar program was held five days before ours, particularly when our meeting dates had been selected and publicized well in advance. The Committee feels this may have affected our attendance.

Other areas of discussion by the Committee this year included a discussion of the progress of the statewide Emergency Medical Services System in Kentucky. We were pleased to learn that a member of the Committee has agreed to work on a part-time basis in the capacity of Coordinator to continue the thrust of the state emergency programs. The Committee continues its interest in the ideal of having instruction in basic life support be a part of Kentucky's public school curriculum. Members of the Committee are pursuing this with school board authorities and we are hopeful that more efforts in this regard can be made in the future.

The members of the Committee gave a considerable amount of time and effort this year and I would like to express my appreciation to them for their dedicated interest in the area of emergency health care.

E. Truman Mays, M.D., Chairman

Recommendations, Reference Committee No. 2

The Reference Committee reviewed the Report of the Emergency Medical Care Committee and commends this Committee for a job well done. It was recommended by the Committee that it would be beneficial for all physicians to be made aware of the call numbers of the Military Assistance to Safety and Traffic Units.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

Report of the Interspecialty Council

A major accomplishment of the Council this year was the consideration and adoption of guidelines for recognition of specialty groups at the request of the Executive Committee of the KMA Board of Trustees. The Council agreed that the criteria which specialty groups would have to meet for KMA recognition were:

1) Specialty groups must have a national or parent organization that is recognized by the AMA:

2) Specialty groups to be recognized, may or may not have a separate and distinct certifying board;

3) The state specialty group applying for recognition must first have formal affiliation with its national counterpart:

4) A specialty group must be a primary specialty or "major" subspecialty in terms of delineated scientific knowledge within the realm of the discipline of medicine;

5) The specialty group must have sufficient membership or potential membership to make worthy and significant contributions to the KMA Annual Meeting, to be decided by the KMA Executive Committee.

In addition, it was noted that any specialty group may utilize KMA specialty services.

In line with these guidelines, the Council reviewed and approved the request of the Kentucky Society of Allergy and Clinical Immunology for KMA recognition and referred their endorsement to the Board of Trustees where the society was officially recognized. This group shall serve as the state affiliate of the American Academy of Allergy.

The Council received a status report and maintained interest in the continuing medical education program tied to licensure. Rather than describe this program in this report, we would refer you to the report of the Continuing Medical Education Committee.

A report was presented to the Council by Mr. Paul Osborne, Executive Director of the Kentucky Peer Review Organization, concerning the development of medical criteria guidelines. It was learned that a model criteria book had been developed by KPRO and was in the process of being revised by local hospital staffs and other committees. Mr. Osborne further reported that the KPRO review on a pilot basis will begin in the latter part of September and that as many as 75 hospitals may be under the program by the end of June 1977. By the end of December 1977, all hospitals should be within the KPRO review program depending on the continued progress of KPRO with regard to designation by the Department of Health, Education and Welfare as a conditional PSRO.

As an informal activity coordinated through the Interspecialty Council, we would like to again bring to the attention of Association members the administrative and clerical services offered by the KMA Headquarters Office to the specialty groups. Several of the groups continue to utilize this assistance which is provided by KMA at cost.

I would like to personally thank all of the specialty

group representatives for their interest and would encourage all groups to continue maintaining liaison with the Interspecialty Council.

James B. Holloway, Jr., M.D., Chairman

Recommendations, Reference Committee No. 2

The Reference Committee reviewed the Report of the Interspecialty Council and commends it for establishing guidelines for the recognition of specialty groups.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Resolution J

Pennyrile Medical Association

WHEREAS, the Kentucky Medical Association and its House of Delegates have repeatedly, in recent years, discussed continuing medical education and its implementation and requirements, and

WHEREAS, the Kentucky Medical Association and its House of Delegates have repeatedly discussed the implementation of continuing medical education as it associates with relicensure and re-examination, and

WHEREAS, the Kentucky Medical Association membership has expressed a desire in the past not to associate continuing medical education with relicensure requirements, therefore be it

RESOLVED, that the House of Delegates go on record as officially opposing any association between continuing medical education and relicensure, and be it further

RESOLVED, that the Kentucky Medical Association members oppose any examination for relicensure, and be it further

RESOLVED, that the Kentucky Medical Association encourage, foster, and implement an active continuing medical education program for its members and associates, but it should be for once and all understood that we will not, shall not, and cannot endorse a relationship on continuing medical education to relicensure, and be it further

RESOLVED, that the Kentucky Medical Association House of Delegates and the Board of Trustees oppose the current regulations by the Licensure Board in its planned implementation of CME associated relicensure action.

Resolution L

Jefferson County Medical Society

WHEREAS, the medical profession is enthusiastically supportive of Continuing Medical Education, and

WHEREAS, the history and development of all medical specialty boards, together with all modern courses and methods for Continuing Medical Education, is testimony to the fact that physicians are strongly in support of voluntary Continuing Medical Education, and

WHEREAS, the actions of the Jefferson County Medical Society as they formed the Louisville Area CME Consortium is strong evidence that we favor Continuing Medical Education, and

WHEREAS, there is no law requiring mandatory continuing medical education for the re-registration of a medical license, and

WHEREAS, there is no concrete evidence that mandatory continuing medical education is superior to voluntary continuing medical education, and

WHEREAS, the administration of medical matters is increasingly being taken from the control of physicians, therefore be it

RESOLVED, that this House of Delegates instruct the KMA Board of Trustees to create and maintain a CME committee or council which would have the responsibility of evaluating and recording the CME programs offered and completed by every physician, and be it further

RESOLVED, that the registration of a license to practice medicine shall not be contingent on mandatory continuing medical education.

Resolution T

Clark County Medical Society

WHEREAS, mandatory Continuing Medical Education should be within the province of the County Society or Medical Staff as required by their own standards and should not be in the realm of any State Agency or any State Medical Society as a requirement for relicensure, and

WHEREAS, if mandatory Continuing Medical Education is passed, medical administrative matters would be more and more out of the hands of physicians and the best interests of our patient would not be served, and,

WHEREAS, mandatory Continuing Medical Education is only an endorsement of the KMA and is not law, therefore be it

RESOLVED, that the Clark County Medical Society is on record as being absolutely and totally opposed to any type of mandatory Continuing Medical Education by any State Agency or State Medical Society as a requirement for relicensure.

Recommendations, Reference Committee No. 2

The Reference Committee next considered Resolutions J, L, and T together since they were all three related. The majority of the Committee time was spent on these three Resolutions. Each individual was given adequate opportunity to be heard and, in number, those against continuing medical education tied to re-licensure seemed to outweigh those in favor.

The Committee reviewed Resolution A that was passed in 1974 and would like to include the Resolves, the Reference Committee Report, and the action the House of Delegates took in 1974 for your information:

"RESOLVED, that the KMA endorse and hereby call upon its staff to administratively establish a system for insuring the systematic participation of all physicians in continuing education based on the following components:

A. A continuing education requirement in some detail, and by specialty, as described in the document: KMA Continuing Education Program for Physicians.

B. A proviso that the plan as herein adopted by the KMA may be modified from time to time, specialty by specialty, as recommended by respective specialty

societies and approved by the KMA Board of Trustees.

C. A system for the collection of records and data, pertinent to establishing the compliance of physicians with those educational standards, which is open to all physicians licensed in Kentucky, whether KMA members or not.

D. Every physician to be allotted a period of three years from July 1, 1975, to furnish evidence of his compliance with the continuing education requirements of his specialty as spelled out in A. above, and provided that continued compliance after the initial three years will be based on the same standards for subsequent three year periods—or less, as indicated in the KMA plan.

and be it further

RESOLVED, that the Kentucky Board of Medical Licensure be requested to require (by regulation) satisfactory participation in continuing education for re-registration of the license to practice medicine.

Recommendation, Reference Committee No. 2 (1974)

The reference committee considered Resolution A in great detail. The reference committee would like to thank the KMA Medical Education Committee for the large amount of time and work that it has spent on the problem over the last several years. A prolonged and enlightening discussion was forthcoming from the floor. The pros and cons of this resolution were well ventilated. The reference committee wishes to make it clear that this resolution requires a satisfactory participation in continuing education for re-registration of the license to practice medicine and is not to be construed as endorsing an examination of any type for re-registration of license. The reference committee recommends adoption and implementation of Resolution A.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)" (1974)

After considerable discussion, it was felt by the entire committee that the actions of the committee had to be governed and tempered by our previous actions and by our previous commitments. On this basis, we recommend reaffirming the action of the House of Delegates of 1974.

We, therefore, recommend that Resolutions, J, L, and T not be approved.

Mr. Speaker, I move the adoption and implementation of this section of the report.

The motion was seconded. A motion was then made and seconded from the floor to accept Substitute Resolution L which was in fact the original Resolution L introduced by the Jefferson County Medical Society entitled, "Mandatory Continuing Medical Education by KMA and not Kentucky Board of Medical Licensure." A roll call vote was taken, and the vote was 90 to 78 to accept Substitute Resolution L. Therefore, this section of the report was adopted for implementation as amended.

Mr. Speaker, I move the adoption of Reference Committee No. 2 as a whole, as amended.

(The motion was seconded and carried.)

Mr. Speaker, I would like to thank the members of this Reference Committee for their help and deliberation in the matters brought before this committee and Mrs. West for her help in preparing the report.

REFERENCE COMMITTEE NO. 2

Harold D. Haller, M.D., Louisville, Chairman
Colby N. Cowherd, M.D., Lexington
W. Bruce Hamilton, M.D., Shepherdsville
Wally O. Montgomery, M.D., Paducah
Don R. Stephens, M.D., Cynthiana

REFERENCE COMMITTEE NO. 3

Harvey A. Page, M.D., Pikeville, Chairman

Reference Committee No. 3 considered the following reports and resolutions:

17. Report of the Maternal Mortality Study Committee

21. Report of the Committee on Occupational Health

26. Report of the Committee on National Legislative Activities

27. Report of the Committee on State Legislative Activities

33. Report of the Committee on Environmental Quality

39. Report of the Committee on Physicians' Health

1. Report of the President, the entire section numbered Topic VIII—Malpractice, beginning the middle of Page 1.8 and ending the middle of Page 1.10, *only*.

5. Reports of the Chairman, Board of Trustees; beginning with the third full paragraph on Page 5.2 through the second full paragraph on Page 5.3, pertaining to Liability Insurance, *only*

Beginning with the seventh full paragraph on Page 5.7 through the fourth paragraph on Page 5.8, pertaining to Liability Insurance, *only*

The fourth full paragraph on Page 5.9, pertaining to Liability Insurance, *only*

Resolution W—Kentucky Medical Insurance Association (KMA Board of Trustees)

Resolution P—Optometric Involvement in Medical Care (Jefferson County Medical Society)

Resolution R—Unrealistic Narcotics Regulations (Jefferson County Medical Society)

Resolution X—Physicians' Assistants (L. C. Hess, M.D.—Boone County Delegate)

Report of the Maternal Mortality Study Committee

The Kentucky Medical Association Maternal Mortality Study Committee met twice during the year from July 1975 to June 1976. The Committee met in September 1975 at the time of the Annual Meeting and again in May 1976. Fifteen cases were discussed and classified. The operation of the Committee continues as it has in previous years. It has been stated in previous reports and is reiterated again this year, that it is unfortunate that a mechanism has not been developed to have the

physician that is involved in the management of the case present at the time the Committee meets. This could be an important aspect of the work of the Committee since frequently there is insufficient material presented in the protocol. It is urged that some method be established by the Kentucky Medical Association to effect attendance by the physician who cares for the patient.

During the last year, with the exception of two months, the case has been reported in *The Journal* of the Kentucky Medical Association.

John W. Greene, Jr., M.D., Chairman

Recommendations, Reference Committee No. 3

The Report of the Maternal Mortality Study Committee was reviewed and discussed by this Reference Committee. It is urged that some method be established by KMA to effect attendance by the physician who cares for the patient.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

Report of the Committee on Occupational Health

The Committee on Occupational Health held one meeting during this Associational year. The Committee members discussed health problems caused by toxic materials used in factories and OSHA standards, as well as first aid availability in business. Also discussed were disability insurance policies and the need for physician participation in company negotiations.

The Committee voted to again co-sponsor with the Kentucky Occupational Medical Association the Occupational Health Seminar held June 4-5 at the Galt House in Louisville. Approximately 100 people attended including physicians, nurses, and other allied health groups who are involved in occupational medicine.

The Committee also discussed the Medical Information Service by Telephone (MIST) sponsored through the University of Louisville. Under this program a physician in Kentucky desirous of a consultation could place a call through a WATS line and would be connected with a participating physician whose specialty concerns the nature of a consultation. Questions were raised concerning adequate professional liability insurance coverage in light of the current situation, and a majority of the Committee members voted not to participate at this time.

I am appreciative of the continuing efforts of the members of the Committee on Occupational Health.

John E. Trevey, M.D., Chairman

Recommendations, Reference Committee No. 3

The Report of the Committee on Occupational Health was reviewed by the Committee. In the discussions that ensued, it is encouraged that the MIST (Medical Information Service by Telephone) Program be continued, encouraged, and publicized, in that the program is effective and no liability is felt to be placed on the consultant.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

Report of the Committee on National Legislative Activities

In recent years KMA has become increasingly active in national legislative activities, which is indicative of the concern of physicians nationwide, we feel, with increased government involvement in medical affairs. This heightened interest, too, must be ascribed somewhat to the militant stand the AMA has adopted on a number of current issues, but also reflective of KMA's expanding involvement in sociopolitical issues.

As reported last year, some thought had been given to omitting or changing the format of the Washington Dinner, and it had been suggested that in lieu of the Washington Dinner this year, a number of brief visits might be made to the Congressional delegation on specific matters. Three formal visits were made with members of the state's Congressional delegation this year, in addition to numerous phone calls and submission of formal policy statements on various Federal regulations, proposed procedures by administrative agencies, and proposed legislation.

In addition to these activities, other related efforts were undertaken such as attendance at the Vice President's economic forum held in three major cities in the country during the first part of the calendar year. The purpose of these forums was to "bring the government to the people" and hear their voice on topics of concern related to health, the economy, transportation, education, and welfare. KMA was represented at this forum and followup contact was made with the Vice President's office and the Secretary of Health, Education and Welfare to expand KMA's views on these subjects.

Comments on proposed regulations were submitted to various Federal agencies on a number of occasions relating to such matters as standards for radiologic equipment; regulations and guidelines for the designation, operation and funding of health systems agencies, and other standards relating to PL 93-641 (the National Health Planning and Development Act of 1974); regulations pertaining to various segments of the Medicare and Medicaid laws, and others.

General discussions with Kentucky's Congressmen included such topics as Federal budgeting for health care expenditures (PL 93-641), Medicare and Medicaid, Professional Standards Review Organization, etc. Specific written comments and discussions were directed to portions of various proposed health manpower bills (S. 3239 and others), clinical laboratories legislation (S. 1737 and H.R. 11341), the Administrative Procedures Act (H.R. 12048, S. 3297), and specific Medicare and Medicaid amendments (S. 3205).

These efforts were aided by the assistance of the Washington Office of the AMA, as well as individual Key Man contacts and informal contacts by other officials of the Association, all of whom we would like to thank.

Continued evaluation will be given to the Washington Dinner in the upcoming nonlegislative year, and the

Committee would solicit the input of the Association members regarding the effectiveness and the format of this trip. We would urge that intensive involvement by the Association in these areas be continued and would also urge each individual member of the Association to act as KMA's representative with regard to the Congressman from his district.

Paul J. Parks, M.D., Chairman

Recommendations, Reference Committee No. 3

The Report of the Committee on National Legislative Activities was reviewed and discussed by the Committee. The Committee is commended for its individual and group activities.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Committee on State Legislative Activities

The Committee on State Legislative Activities was extremely busy during this Associational year. During the 1976 Kentucky General Assembly, the Committee worked closely with the Executive Committee and the Board of Trustees in passage of two important pieces of legislation, Senate Bills 248 and 249, which dealt entirely with liability insurance. We are extremely pleased that the major items which the House of Delegates determined were important to us are included in the final liability insurance legislation.

Following the 1976 General Assembly, every member of the Association received a special report on the actions of that General Assembly, and particularly, a summary of the liability insurance legislation. To supplement that mailing, some of the other activities of the General Assembly and our actions during that session are covered in this report. Many pieces of legislation are entered in each General Assembly which affect medical and health care in one manner or another. During the 1976 General Assembly KMA took a stand on 59 bills which were felt to be of significance to the Association. It is extremely gratifying that our stand was successful on 53 of those 59 bills for a winning percentage of 89 percent.

Experience from this session of the General Assembly indicated a need for continuing emphasis on our legislative activities. An ongoing attempt should be made to build up rapport with members of the General Assembly and in this, the Key Men play an ever increasing role. Our Frankfort Office was of great assistance to us, and I would urge you to continue the activities of that Office in the years ahead. The Frankfort legal counsel, which was retained to assist KMA during the 1976 General Assembly, was extremely helpful, and it is our feeling that this type of arrangement can be of great importance in future legislative sessions.

I want to take this opportunity, as Chairman of the Committee on State Legislative Activities, to express my thanks to all the members who served so diligently, to the Executive Committee, Board of Trustees, Key Men and all others who worked without fanfare in behalf of medicine during the General Assembly. Without the efforts of a great many people, we could not have been nearly as successful.

Carl Cooper, Jr., M.D., Chairman

Recommendations, Reference Committee No. 3

The Report of the Committee on State Legislative Activities was reviewed by the Committee, and again, the Committee is commended for its large amount of work.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Committee on Environmental Quality

The Committee on Environmental Quality of the Kentucky Medical Association has been seeking to find a more specific and definable role in which it can function as a more effective working Committee and as part of the overall committees of the Kentucky Medical Association. During the year 1975 the Committee met with the Chairman of the Department of Natural Resources and Environmental Quality of the State of Kentucky, Mr. John S. Hoffman, in his office in Frankfort, in order to establish some type of working relationship with that Department, and to seek to function at least as a non-official advisory type Committee on any pertinent problems that might arise which could require some active participation.

The Commissioner at that time, Mr. Hoffman, was receptive to the whole idea and the Committee felt that it had at least established a first approach in this regard; since then, however, there has been a change in the Chairmanship of the Department of Natural Resources in Frankfort, from Mr. John Hoffman to Mr. Robert Bell, and at this time it is of some concern to the Committee whether or not the Committee can be continued through various Administrations as an advisory body.

In the past several years the KMA Committee on Environmental Quality has been formed from six or seven physicians from various regions of the state who have prime interest in environmental conservation and environmental quality. However, it appears that there has not been a well definable role in which this Committee may function as part of the KMA. As of this report it is felt that a meeting might be sought with the members of the KMA Committee on Environmental Quality and the officials of the Environmental Quality Commission, which itself is an advisor to the Department of Natural Resources for Environmental Protection.

The Chairman attended one of the Environmental Quality Commission meetings in 1976. This meeting was held at the Capitol Plaza Tower in Frankfort and the subject was titled "Water Quality Control". It has been a consensus of Committee members that further expansion of membership to include other regions of the state with an increased membership from about seven to about ten or twelve, would be in order; however, as of this time the expansion of the Committee has not taken

place. Certainly, it is felt that those who accept membership should be actively interested in environmental quality problems in the state of Kentucky, particularly those that relate to their own areas on a local or regional basis, as well as any overall problems that might exist.

Even if detailed reports by Committee members are gathered on problems of environmental quality in various regions of the state and submitted to the House of Delegates, it is not known if there would be action or interest by the House of Delegates and KMA. Such a report was written by the Chairman of the Committee last year on an environmental problem within his region, and one which has been the subject of some concern by people locally, but which has likewise become involved with some local political and state interrelationship with the result that little or no action has been taken to correct it. It is of some concern as to whether further reports, if written in some detail with some interest in environmental problems in another part of the state, would find the proper forum for exposure before the House of Delegates. Physicians, because of their unique background in the chemical and biological sciences would seem to be ideally qualified to assume responsibilities in their community as relates to environmental problems. Many times when environmental problems are overlooked on the local level because they may implicate local elected political officers and, therefore, tend to go unheeded and ignored over many years period of time, physicians themselves, who have always had an independent role in the community could be the ones to see that such problems are not neglected and these are certainly numerous in every community and region of Kentucky.

In the remainder of 1976, in a series of another two meetings, the KMA Committee on Environmental Quality will carefully examine what more specific and definable role it might play to be a more effective committee in the total context of environmental quality. The Committee itself would much prefer to be an active functioning and needed committee in whatever role it might play in the Kentucky Medical Association.

At its July 16 meeting, the Committee agreed to begin a process of reorientation and education to familiarize itself not only with current specific environmental issues in the state but with pertinent regulations and local ordinances that would apply to them as well. To supplement these efforts, the Committee will be in contact with each KMA Trustee to request names of concerned physicians in each KMA District who would actively serve and could represent environmental problems in their particular regions. The beginning of the educational process will start at the next meeting where an expert will be invited to discuss air quality standards. A portion of this meeting will also be directed to, hopefully, becoming acquainted with state government environmental quality representatives who will be invited.

To further the intent of and promote KMA's environmental quality interests, the Committee recommends to the House of Delegates that strong efforts be made to have a member physician appointed to serve on the state Environmental Quality Commission. This individual would also serve on the Committee to provide liaison and communication. The Committee also recommends that a seminar be conducted in the fall or first part of 1977, in one of the state parks, that would address our state's environmental issues and serve as a forum for the exchange of ideas on resolving environmental problems most appropriately.

L. James Black, Jr., M.D., Chairman

Recommendations, Reference Committee No. 3

The Report of the Committee on Environmental Quality was reviewed and discussed by the Committee.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Committee on Physicians' Health

The Committee has had one meeting. The basic purpose of that meeting was to try to define the philosophy and procedures by which this Committee could best serve the membership. From this meeting has grown the following observations:

(1) The Committee will limit its concerns to evaluation and recommendations dealing with practice problems that suggest an impairment of a physician's health. When specific problems concerning the capability of a physician arise, the Committee will be available if requested. We anticipate dealing with problems that involve organic brain disease, abuse of chemicals, frank psychiatric disorder, or other conditions which might bring into question the physician's ability to function properly.

(2) Administratively, the Committee will function in coordination with the Judicial Council of the KMA and has requested that it be appointed yearly by the Board of Trustees.

(3) As for the mechanism by which a physician might be brought to the attention of this Committee, we suggest that most referrals come through the Judicial Council. In addition, the Committee could accept referrals directly from the individual physician or a relative and, also, from local or county medical or administrative authorities, provided those involved prefer to avoid referrals through the Judicial Council.

(4) We want the membership in general and other appropriate citizens of the State to know that this Committee exists and will, under the special circumstances and limitations noted, help to evaluate situations in which a physician's health problem is influencing function. It is also important to note that the Committee wishes to have a palliative and advisory function and is to have no authority whatsoever, channeling its observations and its recommendations only to the impaired physician, the physician's family, and the Judicial Council.

(Operating guidelines were drafted which reflected the four points first discussed, and these were approved by the Executive Committee of the Board of Trustees).

So far, a number of names have come up for our consideration, but in every case the issues raised have been resolved satisfactorily before the individual actually appeared before the Committee. We feel that the solution of problems at the family or the local level is

highly desirable, and if the very existence of the Committee can enhance this likelihood of early, adequate, and local attention to the impaired physician, then the Committee is still contributing even though not actively involved.

David L. Stewart, M.D., Chairman

Recommendations, Reference Committee No. 3

The Report of the Committee on Physicians' Health was reviewed by the Committee.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the President

Topic VIII—Malpractice—Only

Senate Bills 248 and 249 were the Kentucky Medical Association's answer to the liability crisis during the year 1975-76. Let me say first that there is no known solution to the medical malpractice problem. From January 1975 through the entire year, efforts were made through the Governor's Task Force to have recommendations before the General Assembly which would help in the availability and cost of malpractice insurance. Representing KMA on the Governor's Task Force were Doctors Tom Marshall and Ballard Cassady. These two men gave hours of their time and served you well.

There were 17 major points which the 1975 House of Delegates felt should be included in this piece of legislation and, for the most part, the major points were gained. But, as each of you know, when dealing with the General Assembly, politics is the name of the game, and compromise really is the "art of politics." We were, through the efforts of the Legislative Committee, our lobbyists, and especially Governor Julian Carroll, able to come out with a piece of legislation which your officers felt was the best piece of legislation possible at that particular time under existing circumstances.

The primary features of this legislation were: (1) the establishment of a Patient's Compensation Fund, which would cover physicians' and hospital liabilities in excess of $100,000, being funded by a 10 percent charge of each physician's basic policy and a $50.00 per hospital bed charge; (2) mandatory physician and hospital participation in this fund; and (3) confidentiality of peer review records and other features.

It is true that there are certain objectionable features, chief among which is the mandatory participation of all physicians. However, in order to have a liability limit fiscally feasible, mandatory participation by all physicians was necessary. There are those among you who have objected to other segments of this law, particularly that section which deals with the confidentiality of peer review, but in the minds of the Board of Trustees and your officers, this was a significant step forward on your behalf. Presently the constitutionality of the law is being tested in the courts and, hopefully, we will be hearing of a favorable judgment in the immediate future.

The medical liability problem will persist, in my opinion, for the immediate future. Until some revision of the tort system can be accomplished in a constitutional fashion, I am afraid that we will have a problem of medical liability. It does seem to me, however, that there should be a way of differentiating true malpractice from medical accidents and that if this, in fact, could be accomplished and awards made accordingly, it might be of some help.

At the direction of the Board of Trustees, your officers and legal counsel have continued to search into the possibility of a KMA-owned and operated medical insurance company. The Board of Trustees has committed funds for this purpose and is, at the present time, conducting a feasibility study toward this end. Whether or not our own insurance company will be the ultimate solution to the liability crisis remains to be seen. However, if we are forced into a Joint Underwriting Association by withdrawal from the market of participating underwriters, a KMA company will be available to us. There are those who would say we should practice medicine and leave the insurance business to others, but we may be forced into this unfavorable position. If so, our efforts along the lines suggested will certainly be helpful.

Before leaving the subject of malpractice, I must comment that it is most likely to become necessary, perhaps not this year but at least by the following year, to have additional funds made available to the Board, earmarked for seeking further solutions to this problem. There is no need to do so at the present, but future developments may dictate such a course. Incidentally, there was a total amount of $125,610 collected in the past year, and as of this date we have spent $87,940.

Recommendations, Reference Committee No. 3

The Report of the President, the entire section numbered Topic VIII—Malpractice, beginning the middle of Page 1.8 and ending the middle of Page 1.10, *only*, was reviewed and discussed by the Reference Committee.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Chairman, Board of Trustees

Sections Dealing with Professional Liability Insurance Only

Liability Insurance remains an example. KMA received input through the House of Delegates in September of 1975, kept the membership as fully informed as possible, and attempted to seek advice through *The Journal*, the "Communicator," and specially designed "Liability Insurance Newsletter." A well-publicized statewide hearing was held on Liability Insurance for all Kentucky physicians—unfortunately with minimal participation.

We overextended our staff and legal counsel, hired additional expertise in the field of law, opened an office in Frankfort, and did everything possible to perform in what was felt to be in the best interest of our membership. As the Kentucky General Assembly adjourned, I frankly admit we were quite proud of the efforts of everyone involved in this successful endeavor.

Kentucky's new law has not been proved to be constitutional as of this writing. It is designed to incorporate points of law already known to be constitutional and avoids areas which may appear attractive to us but conflict with Kentucky's Constitution. While it received a high rating from many people in other states and at the natioval level, not one of us thinks it is the final answer to our problems. We do feel it is at least a stopgap measure to keep the market open and keep costs as low as possible through premiums governed by the Commissioner of Insurance.

We are not slacking up and there are more challenges ahead of us in the field of Professional Liability Insurance. We are daily monitoring what is taking place, both locally and nationally, preparing to amend the law which we have just passed as may be indicated, and are already investigating the formation of a KMA-sponsored insurance company in the event of a crises.

* * * * *

A panel discussion on liability insurance was held and Board members heard a report by Thomas Marshall, M.D., on the Governor's Task Force proposal. The opening of the Frankfort office during the General Assembly and the hiring of additional staff to handle the malpractice legislation was also reported on. A lengthy discussion was held on specific points of the legislation and it was the recommendation of the Board of Trustees to support the Majority Report as submitted by the Governor's Task Force.

* * * * *

Third Meeting, February 19, 1976

The Board held a special meeting on February 19 to review in detail two professional liability insurance bills, one including numerous sections addressing the Liability Insurance problem and the other dealing solely with the formation of a Joint Underwriting Association, should such ever become necessary to put into operation.

There was a full explanation concerning each of the 19 principles passed by the 1975 House of Delegates concerning Liability Insurance, and a discussion pertaining to those five points contained in the Majority Report of the Governor's Advisory Committee that were not contained in the Governor's Liability Insurance Bill. It was again reiterated that KMA had filed a Minority Report with the Governor's Commission stating our opposition to the mandatory participation aspects of the bill and also expressing our desire to see some type of a limitation on awards.

In addition to the liability insurance subject, a brief report was also made on several other bills of interest to KMA, including the Physicians' Assistant bill.

Fourth Meeting, February 26, 1976

The Board of Trustees met briefly on February 26 just prior to the special session of the KMA House of Delegates at which time a Resolution was adopted for presentation to the House relating to support of SB 248 and SB 249 with the exception of the provision of 7-3(a-d) in SB 248 and other references in that bill made to the review of claims by a "Board of Claims."

The Committee on State Legislative Activities reported an 89.8 percent success rate on all bills pertaining to health in the 1976 Kentucky General Assembly. The Public Relations Committee campaign on liability insurance was ruled a success and legal counsel pointed out a possible test suit on SB 248 may be filed in the near future. Funds were authorized to conduct a feasibility study to determine the advisability of setting up a KMA-controlled insurance company.

Recommendations, Reference Committee No. 3

The Committee reviewed and discussed the following portions of the Report of the Chairman of the Board of Trustees pertaining to Liability Insurance: Beginning with the third full paragraph on Page 5.2 through the second full paragraph on Page 5.3; beginning with the seventh full paragraph on Page 5.7 through the fourth paragraph on Page 5.8; and the fourth full paragraph on Page 5.9, *only*.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Resolution W

KMA Board of Trustees

WHEREAS, the availability of professional liability insurance coverage is the focal point of the continuing liability crisis, and

WHEREAS, investigation into the creation of a KMA-controlled or "captive" insurance company indicates this to be a potential alternative to ease the availability and cost problems, and

WHEREAS, it would be wise to prepare in advance for the advent of new and additional crises in the private professional liability insurance field, now therefore be it

RESOLVED, that this House of Delegates approves the concept of the development of the Kentucky Medical Insurance Association and its implementation based on continuing study and need, and be it further

RESOLVED, that KMA Delegates provide a basis for determining membership interest and statistical justification for the KMA by completing the questionnaire form attached to the insurance proposal and returning it to the KMA office for compilation.

Recommendations, Reference Committee No. 3

The Committee reviewed and discussed Resolution W —Kentucky Medical Insurance Association—which was introduced by the KMA Board of Trustees. The Committee recommends changing the word "based" in the third line of the first "Resolved" section to "dependent," and adding the words, "as determined by the KMA Board of Trustees," following the word "need." The first "Resolved" section would then read as follows: "Resolved, that this House of Delegates approves the concept of the development of the Kentucky Medical Insurance Association and its implementation dependent on continuing study and need as determined by the KMA Board of Trustees . . ."

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

Resolution P

Jefferson County Medical Society

WHEREAS, in the Spring of 1976 a contiguous State Medical Society and its medical eye physicians, and therefore the public, suffered intrusion into the practice of medicine by way of the West Virginia State Legislature enacting over the Governor's veto, a law permitting optometrists to render most of the eye care traditionally provided by trained ophthalmologists, and

WHEREAS, this should serve as a fair warning of the times to the medical community that all sectors of medical practice should be on guard for further intrusion into the licensed practice of medicine by non-medical and paramedical groups, and

WHEREAS, the official policy of Kentucky physicians should be made known for continued guidance in opposing attempted intrusion into the practice of medicine by non-physicians, and

WHEREAS, the Kentucky Medical Association, has, in the past State Legislative sessions, opposed attempts by Kentucky optometrists to enter the practice of medicine, and

WHEREAS, the American Medical Association House of Delegates, in its June, 1976, meeting, officially adopted a policy in opposition to licensing optometrists to practice medicine or surgical eye care, now therefore be it

RESOLVED, by the House of Delegates that the House of Delegates of the Kentucky Medical Association reaffirm its policy that only physicians licensed to practice medicine and surgery in all its branches are qualified to prescribe or apply eye medications, and be it further

RESOLVED, that the Kentucky Medical Association continue to oppose any legislation or administrative attempt to give optometrists and other non-physicians a license to prescribe or apply medications, or to diagnose disease or injury, or to diagnose the absence of disease or injury.

Recommendations, Reference Committee No. 3

Resolution P—Optometric Involvement in Medical Care—introduced by the Jefferson County Medical Society, was reviewed and discussed by the Committee. The Committee recommends that the words "and other non-physicians" be deleted from the third line of the last "Resolved" section of this Resolution.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

Resolution R

Jefferson County Medical Society

WHEREAS, the ability of the physician to provide the drug he wants for his patients is constantly being interfered with, and this frequently leads to unsatisfactory care for the patients, and

WHEREAS, most of the drug decisions are made by a very small minority of our profession who are frequently serving a different master, and

WHEREAS, the Kentucky Narcotic Regulations are more difficult than Federal Regulations and make it almost impossible to treat a patient with a narcotic when they really need it and frequently necessitate that the physician, the nurse, or druggist violate the law and be subject to suit or inconvenience if they are to live up to their oath to relieve pain, now therefore be it

RESOLVED, that the Kentucky Medical Association investigate the State Narcotics Regulations and try to have them changed where needed to be more realistic for the practice of medicine and the needs of the patient, and be it further

RESOLVED, that the Kentucky Medical Association investigate all new drug regulations and inform its membership and take action whenever these regulations are not in the best interest of medicine, and therefore the patient.

Recommendations, Reference Committee No. 3

The Committee reviewed and discussed Resolution R—Unrealistic Narcotics Regulations—introduced by the Jefferson County Medical Society, and recommended that the following substitute Resolution be adopted and implemented:

WHEREAS, the ability of the physician to provide the drug he wants for his patients is constantly being interfered with, and this frequently leads to unsatisfactory care for the patients, and

WHEREAS, most of the drug decisions are made by a very small minority of our profession who are frequently serving a different master, and

WHEREAS, narcotic regulations in Kentucky make it impossible to give a narcotic in a nursing home under emergency conditions and this frequently necessitates that the physician, the nurse, or the druggist violate the law or be subject to extreme inconvenience as the patient suffers, now therefore be it

RESOLVED that the Kentucky Medical Association investigate the State and Federal Narcotic Regulations and try to have them changed where needed to be more realistic for the practice of Medicine and the needs of the patient.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

Resolution X

L. C. Hess, M.D.

WHEREAS, this House of Delegates has approved the concept of physician's assistants, their utilization under the supervision of a physician, and their certification, to augment physician's services and thereby provide an increased capacity for patient care, and

WHEREAS, the increased emphasis on physician's assistants may create a false impression of need for independent non-physician practitioners, who may act in capacities for which they are unqualified, and

WHEREAS, the delineation of functions for physician's assistants and degree of supervision necessary should be determined on an individual basis depending on the capabilities of the person concerned, as adjudged by the supervising physician, now therefore be it

RESOLVED, that because of the potential for misuse of physician's assistants, and other personnel who might be similarly categorized, in circumstances for which they are not qualified, KMA go on record as being opposed to physician's assistants' licensing, and be it further

RESOLVED, that certification of physician's assistants by means of an approved program and appropriate training or their equivalent as minimum requirements be endorsed by KMA, to reinforce the need for physician supervision and responsibility.

Recommendations, Reference Committee No. 3

The Committee reviewed and discussed Resolution X —Physicians' Assistants—introduced by Lee C. Hess, M.D., Boone County Delegate, and would like to offer the following substitute Resolution:

RESOLVED, that the Kentucky Medical Association reaffirm its position of support for the concept of Physicians' Extenders (Physicians' Assistants, Nurse Practitioners, etc.) but because of potential misuse of Physicians' Extenders and other personnel similarly categorized, firmly opposes licensing of such personnel, and be it further

RESOLVED, that KMA support certification of Physicians' Extenders by the Kentucky Board of Medical Licensure, which shall have the responsibility of determining the qualifications of all such personnel and the parameters of practice, as well as the responsibility of granting approval on an individual basis to licensed physicians who may utilize such personnel.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

Mr. Speaker, I move the adoption of the report of Reference Committee No. 3 as a whole.

(The motion was seconded and carried.)

Mr. Speaker, I wish to thank the members of this Committee, Doctors James Baumgarten, Richard Jelsma, Robert McKenney, and John Stoeckinger, and Miss Debby Traughber for preparing this report.

REFERENCE COMMITTEE NO. 3

Harvey A. Page, M.D., Pikeville, Chairman
Richard K. Jelsma, M.D., Louisville
Robert L. McKenney, M.D., Falmouth
John M. Stoeckinger, M.D., Lexington
James Baumgarten, M.D., Owensboro

At this time, Donald C. Barton, M.D., took the podium as Chairman of the KEMPAC Board of Directors to present his annual report which follows:

Mr. Speaker, Fellow Delegates, and Guests:

As Chairman of the KEMPAC Board of Directors, I thank you for giving me this opportunity to report on KEMPAC activities this past year.

Last year, KEMPAC contributed in excess of $12,500 through physician candidate support committeees in support of candidates for the Kentucky General Assembly. I might mention that 85 percent of the candidates supported through these committees were elected.

This year KEMPAC is working with candidate support committees in support of candidates for the U. S. House. All requests from committees have been considered very carefully by the entire KEMPAC Board.

We cannot stress too strongly the need for physician involvement on the local level for candidates. Not only is your money needed, but good rapport with your local Legislators and candidates in the early years of their political involvement is necessary. Many of these people go on to higher positions in government and will listen to Medicine's viewpoint, and seek advice concerning health care legislation.

KEMPAC will not support anti-Medicine candidates. There are times when candidates supported by Medicine might lose a race—but remember these losers are sometimes future winners, and therefore, dividends are gained later.

The PAC must comply with regulations issued by the Federal Election Commission and report all contributions to this Commission. The American Medical Political Action Committee (AMPAC) keeps us informed as to changes in these regulations, so be assured that all of your KEMPAC dues dollars are spent wisely and in accordance with the law.

The KEMPAC dues year has been changed from a calendar year basis to October 1 through September 30. The dues paid during this Convention are considered 1977 dues and will not have to be paid again until this time next year.

The Family Membership—regardless of marital status —has been changed from $35 to $50. Sustaining Membership remains $100, and Associate Membership remains $20. All of these membership categories include membership in AMPAC.

So that KEMPAC continues to act as an effective arm for Medicine in Kentucky we must have local input from all county medical societies, the advice from the KMA Legislative Committees and KMA lobbyists.

In 1975, as in past years, the KMA House of Delegates reaffirmed its belief in the objectives of KEMPAC and AMPAC and recommended 100 percent participation by doctors and their spouses. It further recommended a vote of endorsement and encouragement of the KEMPAC organization to continue its worthwhile political efforts on behalf of our free enterprise system and the freedom of the art and science of Medicine.

I request that you not only reaffirm this endorsement but work with your colleagues at the county level so that we will have a voice in legislation to keep the free enterprise practice of Medicine.

On behalf of the KEMPAC Board, I want to thank the KMA Board of Trustees, you Delegates, the Auxiliary to KMA, and staff for you help and support.

(Following Doctor Barton's presentation, a motion was made, seconded and carried to accept the KEMPAC report.)

REFERENCE COMMITTEE NO. 4

James P. Moss, M.D., Louisville, Chairman

Reference Committee No. 4 considered the following reports and resolutions:

12. Report of the Board of Directors, Kentucky Physicians Mutual, Inc.

19. Report of the Advisory Committee to Blue Cross-Blue Shield

25. Report of the Claims and Utilization Review Committee

32. Report of the Committee on Community, Rural and Health Care of the Poor

34. Report of the Committee on School Health, Physical Education and Medical Aspects of Sports.

36. Report of the Health Manpower and Placement Services Committee

42. Report of the KMA Advisory Committee to KPRO

18. Report of the Hospital Committee, Page 18.1, paragraph three, pertaining to the cost awareness plan, *only*

Resolution H—Peer Review (First Trustee District Peer Review Committee)

Resolution U—The Double Standard of the Kentucky Medical Association in Relation to PSRO (Clark County Medical Society)

Report of the Board of Directors, Kentucky Physicians Mutual, Inc.

In my second year as Chairman of the Board of Kentucky Physicians Mutual, Inc., (Blue Shield) it is indeed a pleasure to report on another year of growth and positive accomplishments.

During 1975, 1,524 new groups voluntarily enrolled their employees and eligible dependents in Blue Shield of Kentucky making a total of 13,850 member employer groups. This produced a new membership growth of 2.1% over the previous year which we consider respectable in view of the current economic situation. Over 1,367,699 Kentuckians are now covered by Kentucky Blue Shield.

Kentucky Blue Shield paid $42,609,262 for professional services rendered in 1975. Since the organization of Blue Shield in 1949, $285,821,591 has been paid for professional services rendered to our members. A total of 913,435 of our members carry additional benefits through Major Medical and Extended Benefits to help pay for outpatient and catastrophic illnesses and some 87,838 people are protected by the Blue Cross and Blue Shield Supplement to Medicare.

The Prescription Drug Program now has 36,172 members and during last year, $714,660 was paid in prescription benefits.

With the approval of the Department of Insurance we completed the upgrade of obsolete Blue Shield benefits during 1975. With rising costs, we recognized the need to develop and implement an improved indemnity program as an alternative to the full Usual, Customary and Reasonable program. Thus, Schedule 'E' Blue Shield with a maximum indemnity allowance of $1,632 was developed and first offered to groups in November of 1975. A new $250,000 Major Medical program was developed to replace the current Major Medical coverages. This coverage has now been offered to all groups, Farm Bureau members, and direct-pay subscribers.

We now have over 377,545 Kentuckians covered by Usual, Customary and Reasonable Programs. Physician participation continues to increase with 2,854 Kentucky physicians participating. In 1975, 343,415 Usual, Customary and Reasonable services were processed, representing payment of professional services in excess of $17,321,520. Of these claims 7,431 required special handling by our Professional Relations staff and 7,103 of them were processed either by additional information or voluntary reconsideration of the submitted fee. Three hundred and twenty-eight cases required review by peer review committees which represents less than two-tenths of 1% of the cases. Physician cooperation in this program, overall, continues to be excellent.

At the recommendation of the KMA Advisory Committee and the 1975 House of Delegates, the Blue Shield Board directed staff to develop and implement individual physician fee profiles for use in the administration of the Usual, Customary and Reasonable Program. The use of the profiles will provide improved administration in the Usual, Customary and Reasonable Program. Prior to implementing profiles, a discussion is held with the individual physician and an agreement reached on profiled charges. This will enable the physician to know in advance what Blue Shield's Usual, Customary and Reasonable payment for his services will be. The use of profiles will better enable staff to define charge patterns and more accurately rate employee groups who are enrolled in Blue Shield's Usual, Customary and Reasonable benefits. Our Professional Relations staff began contacts with physicians in March of this year to implement the profiles and the entire project should be completed prior to the end of the year.

The health care industry has been confronted with the problem of malpractice insurance and an inflationary economy which has had its proportionate effect on charges. We have seen hospital charges and physicians' fees increase substantially.

In addition to increasing hospital and professional charges, we are also seeing an increase in utilization with the number of services increasing over previous years. At least part of this increase is due to more "defensive medicine" being practiced because of the malpractice situation.

The increasing charges and utilization have a direct effect on Blue Cross and Blue Shield payments and the dues we charge our members. Blue Cross and Blue Shield dues increased in 1975 and because of the rising costs and utilization, additional increases are necessary during 1976. Rates are based on the cost of care and the utilization of services by members plus administrative cost.

Our Blue Shield Plan is sound financially and on January 1, 1976, our reserves amounted to $7.74 per member. This represents 2.55 months of average benefit and administrative costs.

We are pleased to report that a new Blue Shield Physicians Manual has been developed and sent to each physician's office. We believe this will be a valuable tool and will enable physician's assistants to better identify the different levels of subscriber benefits. The manual fully explains the proper billing techniques for all of our programs. There is also a section on coding and nomenclature which specifies the allowance that will be paid on indemnity certificates.

The Utilization Review Program of Blue Cross and Blue Shield has been developed to establish norms and patterns of health care in Kentucky. Using data gathered from inpatient hospital cases, the program provides statistical information from which utilization reports are generated. Using these reports, an educational approach is being taken with providers of care. Each hospital in the state has now been presented a Utilization Review Report outlining data gathered from 1975 inpatient Blue Cross cases. Semi-annual followup reports have also been granted and presented to each hospital. These reports can be very valuable to the medical staff and utilization review committees in monitoring and evaluating medical care and individual physician patterns of practice. Provider response has been excellent and several hospital utilization review committees have requested additional reports and special studies.

Another facet of this Utilization Review Program centers around the development of utilization review summaries produced for each practicing physician in the state. In February, 1976, all physicians who admitted five or more Blue Cross patients to any hospital were advised of the cost of hospital services they order for Blue Cross patients. In addition, Professional Relations representatives are delivering summaries to physicians based on parameters established by our Utilization Review Division. The educational approach is being used by the Professional Relations Division. The data contained in these summaries enables practicing physicians to compare their practice patterns with other physicians in their own specialty. Reports from the profession have been very positive and some physicians are requesting additional summaries so that they may monitor their own practice patterns for changes and trends.

Because of the PSRO legislation and the Medicare Utilization Review regulations which provide for admission reviews, concurrent review, and medical care evaluation, there is an increased need for data gathering and reporting programs such as the Kentucky Utilizaton Program (KUP). There are now 62 hospitals participating in KUP and we expect this number to continue to increase in the future. During 1976 the Blue Cross and Blue Shield Provider Relations staff began offering the Medical Care Evaluation portion of the Kentucky Utilization Program which is designed to assist hospital Utilization Review Committees by generating certain exception reports. We are pleased to announced that 13 hospitals have added this to their KUP program.

Blue Shield has previously reported to the KMA House of Delegates our position to experiment with alternative methods of health care delivery. With the passage of a Federal Health Maintenance Organization Act and the passage of a State Health Maintenance Organization Act, several federally funded HMOs are operating in Kentucky. The 1974 KMA House of Delegates approved the Board of Trustees' resolution endorsing our involvement in a system based on the individual practice association approach.

Blue Shield of Kentucky, jointly with Blue Cross of Kentucky, has developed a prototype of an experimental alternative delivery system utilizing the individual practice association approach which represents open panel practice. Due to the economic climate, inflationary spiral, and the resulting increase in usage and cost to Blue Shield, the Board voted to indefinitely suspend activities in the implementation of the Alternative Delivery System. Staff has been directed to continue to monitor current activities in the marketplace and when indicated, recommend back to the Board the reconsideration of the project.

In previous reports we predicted that national health insurance, when it comes, would be in the form of legislated basic coverages extended to all Americans through categories such as employer contributions, government assistance and the Medicare program. Recent indicators point toward a process of incremental enactment of national health insurance legislation beginning at the other end of the spectrum with a program of compulsory catastrophic coverage on a freestanding basis.

Although basic coverage would not be compulsory, private market carriers would be required to offer certain basic coverages to the entire population within their areas to be eligible to participate in any government program.

We expect it will be at least October 1, 1979, before the congressional and administration consensus takes place on a comprehensive national health insurance. Meanwhile, a catastrophic coverage with a certified program of basic coverage could pass within a year and be enacted 18 months thereafter. This will most likely be guided somewhat by the outcome of this year's Presidential election.

The voluntary prepayment system is still strong, vital to the public, and continues to grow. However, the cost of care continues to be the number one issue in health care today. All of us as individuals are concerned over the rising costs and collectively we need to take action to meet the challenge to preserve the voluntary system. KMA is to be commended due to their action in naming an ad hoc committee on health care costs. We must continue to stay involved and meet the challenge voluntarily.

Our staff has continued to meet with the KMA Advisory Committee on Blue Cross and Blue Shield in an effort to give all physicians the opportunity to have a voice in our operation.

I fully believe that the development and growth of Blue Shield has been one of the major accomplishments of preserving the free enterprise system in medicine. It has been one of my highest honors to serve as Chairman of the Board of a corporation that serves the needs of so many people who have voluntarily chosen to prepay for their health care needs.

I attribute a large measure of the success of our Blue Shield Plan to the leadership and dedication of J. Ed McConnell who retired as President on August 15th. He has been a true friend of organized medicine in carrying out his duties to Blue Shield subscribers and the public. I wish him well in his future combined role of Advisory Chairman and retirement.

On August 15th Don Giffen became the new president of Blue Cross and Blue Shield and Delta Dental of Kentucky and is continuing to give the kind of leadership to which Blue Shield has been dedicated in the past.

As Chairman of the Board, we know our objectives

are in the best interest of the people, the medical profession, and our voluntary system. We again thank the entire medical profession of Kentucky and the staff of the Kentucky Medical Association for their cooperation and contribution in the past year. We know that our future will be largely dictated by how we, working as a team, respond to the opportunities and challenges facing the voluntary system.

Delmas Clardy, M.D., Chairman

Recommendations, Reference Committee No. 4

The Report of the Board of Directors, Kentucky Physicians Mutual, Inc., reveals continuing interest in alternate delivery care forms, utilization, and the availability of quality health care. The Reference Committee recognizes Doctor Delmas Clardy, the retiring Chairman of the Board of Directors, for his report and commends his long record of excellence and service in medical affairs.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Advisory Committee to Blue Cross and Blue Shield

The KMA Advisory Committee to Blue Cross and Blue Shield met at the KMA Headquarters Office on April 22, 1976.

The first order of business was to review and note that the purpose of the Committee is to "monitor the operation of Kentucky Blue Cross and Blue Shield with the objective of striving to furnish for the public the most advantageous coverage possible for the premium dues paid, avoiding abuses of Blue Cross and Blue Shield to include studying and correcting trends before they develop into abuses and continuing to keep Kentucky physicians informed, interested, and with a voice in the operation of Blue Cross and Blue Shield."

We are pleased to have several Blue Shield staff members attend the meeting to report on the status of the Plans.

The following will summarize staff reports that reflect continuing activity and leadership provided by Kentucky Blue Cross and Blue Shield.

1975 KMA House of Delegates Actions

In reviewing the 1975 House of Delegates actions relating to Blue Cross and Blue Shield, there were two specific items referred to the Committee for discussion. The first was adoption of substitute Resolution H which is as follows:

"WHEREAS, payments are made by Blue Cross-Blue Shield to hospitals and physicians for certain outpatient services which are denied the patient and physician for identical services supplied in the physician's office, be it therefore

RESOLVED, that the Kentucky Medical Association direct the Advisory Committee to Blue Cross-Blue Shield to seek to rectify this unjust and illogical coverage and report back through this Advisory Committee at the next annual session."

The staff of Blue Cross and Blue Shield explained that historically, most physicians have included the cost of supplies and services in their total charges rather than itemize the charges or submit a separate bill.

They further explained that legally, according to their Certificate of Membership and their Charter, they could not pay for services of this type. Staff explained that if doctors started separating their charges for supplies and a definite need was exhibited, Blue Cross and Blue Shield could in the future develop some type of rider to pay for these services. But, they cautioned that members would pay additional dues for these benefits.

The second item referred to us from the Annual Meeting was in regard to financial problems arising from medical liability premium inflation and its effect on the Usual, Customary and Reasonable Program. This ensued in the following Resolution being passed by the House:

"WHEREAS, rapidly rising and unpredictable premiums for medical liability insurance may require unforeseen fee adjustments and

WHEREAS, the Usual, Customary and Reasonable concept is based on a retrospective analysis, therefore be it

RESOLVED, that the Kentucky Medical Association direct the Advisory Committee to Blue Cross-Blue Shield to take cognizance of this problem and seek its remedy."

Blue Cross and Blue Shield staff explained that they were presently updating their 90th Percentile guidelines quarterly based on current charges.

They explained that BCBS is paying in full, over 99 percent of the claims submitted and any prospective evaluation of physician charges would be inflationary. They went on to explain that in 1975 only 328 cases out of over 365,000 processed went to Peer Review. In the discussion of this Resolution, it was pointed out that many companies were strongly resisting any further rate increases under their Usual, Customary and Reasonable Program. The Committee agreed that at the present time, Blue Cross and Blue Shield are not in a position to update the 90th Percentile any more quickly than is now being done.

Enrollment

Staff reported that 1975 was another good year for membership growth for Kentucky Blue Cross and Blue Shield. Your Committee was pleased to learn that with the permission of the Commissioner of Insurance, Standard Blue Cross, Standard and Preferred Blue Shield and Ashland Schedules A and B Blue Shield were upgraded to Schedules C and D Blue Shield, effective July 1, 1975.

Delta Dental continued to make gains during 1975, both in growth and financial position. Prospects for increased Delta enrollment in 1976 are very good.

Provider and Professional Relations

Staff reported that a reorganization of the Provider and Professional Relations Division was proving to be a more efficient and effective way of improving communication between the providers and professionals and Blue Cross and Blue Shield.

The primary responsibility of Provider Relations representatives is to provide service to hospitals, skilled nurs-

ing facilities and home health agencies, while the Professional Relations representatives primarily service physicians, dentists, and pharmacies. During 1975 the Professional Relations staff made over 10,900 contacts with physicians' offices.

Staff completed work on a new Blue Shield Manual which was distributed to physicians' offices in May. This manual is designed to provide assistance to physicians' offices in filing claims.

It was noted to this Committee previously that, administratively, it costs as much to reject a Blue Shield claim as it does to pay one. It was felt there was a need to identify services that had the highest volume of rejections and implement a concentrated, educational effort with physicians' offices as to correct filing procedures. In October, 1975, Provider and Professional Relations Division implemented a pilot project in which one Professional Relations representative would concentrate on calls to improve the rejected and returned claim situation with doctors' offices and hospitals. This project has worked very well and resulted in a decrease in the number of claims returned and rejected.

Claims

The volume of claims processed by Kentucky Blue Cross and Blue Shield in 1975 rose in direct proportion to increased enrollment and benefits. Some 364,922 basic Blue Cross claims were processed representing a 16.8 percent increase over 1974; while 729,553 basic Blue Shield claims were processed representing an increase of over 14.2 percent. Including all lines of business, the Claims Division processed approximately 1,789,101 claims during 1975. In 1975 Blue Shield of Kentucky under the Usual, Customary and Reasonable Program paid 365,633 services amounting to $19,318,311. The total amount of services paid by Blue Shield in 1975 amounted to 846,745 which represents a dollar amount paid to physicians in Kentucky of $42,559,247.

Over 132,674 claims were processed in accordance with the Coordination of Benefits provision amounting to a savings in claims payments of $2,018,187. Savings in this amount will have a favorable effect on dues adjustments and this trend should continue during 1976.

Report of the Director of Medical Services

Doctor Asman reported that the three physicians in the Division of Medical Services continued to be quite busy in the year that has elapsed since the last meeting of this Committee.

Most of their time was spent in the medical review and adjudication of Blue Cross and Blue Shield claims. Although they review less than two percent of the Blue Cross claims, and an even smaller percentage of the Blue Shield claims, this requires a considerable amount of time considering the volume of claims received by the Plans each day. The rejection rate for Blue Cross claims continues to be about two-tenths of one percent.

The Medical Services Division reviews and interprets the utilization review studies and medical audits conducted by the Plans.

It was reported that difficulties occasionally arise in some practice areas where records do not always completely reflect the justification for a claim. Blue Cross-Blue Shield continues to work closely with physicians to resolve these problem areas but unfortunately misunderstandings occasionally arise.

The physicians and Provider and Professional Relations personnel meet with hospital utilization review committees and medical staffs, as well as county medical societies, upon invitation and, on occasion, they seek such an invitation when there appears to be a problem that needs to be discussed. The relationship with the medical profession continues to be good on the whole and most physicians realize that the staff is trying conscientiously to do a necessary job.

Usual, Customary and Reasonable

Over 335,000 Kentuckians are now covered by Usual, Customary and Reasonable and 2,854 physicians have signed agreements to participate representing 78 percent of all Kentucky physicians.

Your Committee in 1975 endorsed the individual physician fee profile system. The 1975 KMA House of Delegates also commended and endorsed this report on profiles.

Individual physician profiles will allow Blue Shield to more directly recognize the physicians' usual charges in the program's administration. Implementation of these profiles will enable physicians to know in advance the payment that can be expected from Blue Shield of Kentucky for covered services rendered to members with UCR benefits. This Committee is pleased to report that the Blue Shield staff has initiated contacts with all participating physicians throughout the state to discuss the doctor's individual fee profile. Staff hopes to have all participating physicians profiled by September, 1976.

This Committee discussed physician concern over acceptance of assignments from nonparticipating physicians under the UCR Program. The KMA House of Delegates in 1969 recommended that Blue Shield of Kentucky pay participating physicians directly and to reimburse the patient for services rendered by nonparticipating physicians. Staff reported that BCBS originally honored assignments in order to get the UCR Program started efficiently when the Program began in 1970. Blue Shield is now seriously considering the possibility of no longer honoring assignments from nonparticipating physicians. This will improve administration costs and will be in keeping with the original House of Delegates action.

The Committee feels that Blue Cross and Blue Shield is to be congratulated for their improvement in the UCR Program. The expedient and effective processing of claims will result in greater acceptance by physicians and their patients.

Alternative Delivery Systems

Staff reported on the status of the development of a Health Maintenance Organization type of program by BCBS. This is being done to assure that BCBS can offer a competitive HMO type program to organizations or individuals who might wish to enroll in an HMO rather than a more traditional pre-paid plan.

However, both the Blue Shield Board of Directors and the Blue Cross Board of Trustees have approved a position to postpone the implementation of the HMO type program until such time as the market climate is more

favorable and the opportunity for financial solvency is more attainable.

Utilization Review

The Blue Cross and Blue Shield staff reported that semi-annual reports of hospitals Blue Cross Utilization Review patterns are delivered to all hospital administrators and when possible, the Utilization Review Chairmen.

The Blue Cross and Blue Shield staff also reported on the Kentucky Utilization Program (KUP) which is a data gathering system based on hospital discharges. There are currently 61 hospitals in Kentucky subscribing to this program.

A new program called MCA, which is a medical care evaluation portion of KUP provides hospitals with concurrent, prospective, and retrospective evaluations of patterns of patient care for use by the Utilization Review Committees. Presently there are three hospitals enrolled in MCA and BCBS expects this number to increase rapidly.

Physician Cost Awareness Plan

At the direction of the House of Delegates of the Kentucky Medical Association, Blue Cross and Blue Shield was requested to develop a method of advising physicians of the costs of services ordered for Blue Cross patients.

Parameters were developed which compared physicians according to specialty and location and Blue Shield staff personally contacted over 300 physicians to discuss how they compared to their peers in the areas of length of stay, lab, x-ray, and medication. As a result of these visits, many physicians requested special studies to help them ascertain why they exceeded their peers.

In January of 1976, all physicians who admitted five or more Blue Cross patients during 1975 were mailed their physician summary advising them of the costs of services they ordered for their Blue Cross patients. The Committee feels this is a valuable educational program and is hopeful BCBS will continue its implementation.

Cost Containment

Staff reported that the rapid rise in health care costs is the most important health issue in America today. They noted that representatives from the largest businesses in the world, many of whom have plants in Kentucky, were meeting to discuss what can be done by business to contain health care costs. Some companies have flatly stated that they would accept no more rate increases, which could mean the establishment of front-end deductible and co-pay programs, compounding a collection problem for hospitals and physicians.

Blue Shield of Kentucky reports that under the UCR Program, they are incurring substantial losses due to the rapid rise in utilization of facilities and services. Nationally, Blue Cross and Blue Shield of Michigan alone lost over $125 million in 1975. Staff reports that it is not uncommon for rates to be delivered for Blue Cross, Blue Shield and Major Medical Family Membership totaling between $75 and $95 per month. The Department of Insurance is beginning to resist passing rate increases on to the public without obtaining more identifiable results on cost containment.

Some of the activities Blue Cross and Blue Shield of Kentucky is presently engaged in to help contain costs are physician summaries, physician fee profiles, Blue Cross Utilization Review Studies directed toward the hospitals, and experimental programs such as Pre-Admission Testing.

The Committee is pleased that the Kentucky Medical Association has established an Ad Hoc Committee on Health Care Costs and the Jefferson County Medical Society has established a Health Insurance Liaison Committee. We feel that through committees such as these, good communication, and dialogue between Blue Cross, Blue Shield and the medical profession can occur, which is beneficial to everyone.

Health costs are a continuing problem to both providers and consumers. It is a multifaceted problem to which there is no easy answer. However, the Committee felt it might be helpful if the Blues developed a program which might graphically illustrate that increases in members' dues are the result of rising costs brought on by many factors which consumers as well as providers have some control over.

The Committee endorses the efforts of BCBS in regard to health costs and urges that they continue to work toward bringing a greater awareness of the effects of those costs to the provider and consumer.

This Committee, in its role of maintaining a close working liaison with Blue Cross and Blue Shield, hopes to continue to reflect the policies of this Association and to provide assistance in the upgrading of Blue Cross and Blue Shield coverage for our citizens.

Kenneth P. Crawford, M.D., Chairman

Recommendations, Reference Committee No. 4

Mr. Speaker, the Reference Committee reviewed the comprehensive, thorough Report of the Advisory Committee to Blue Cross-Blue Shield submitted by Doctor Crawford. We agree with him that it would be desirable to graphically illustrate the multiple factors which are responsible for the rising cost of health care. The Reference Committee is encouraged that Blue Cross and Blue Shield are initiating plans to resolve certain inequities in outpatient and office coverage which have been of concern to the members of this Association.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Claims and Utilization Review Committee

The Claims and Utilization Review Committee met on an "as needed" basis this Associational year. As in past years, the Committee has been involved for the most part in review of cases on appeal from district and county society committees and in considering matters of review precedent.

In keeping with procedures established by the Board of Trustees, one-third of the Committee membership was replaced this year, and these individuals occupied the following specialty positions: family practice, internal medicine, general surgery, neurology, orthopedic surgery, pediatrics, thoracic surgery, and urology.

This year the Committee became aware that in some cases claims sent to component committees were outstanding for fairly long periods of time. This resulted in a situation where attending physicians' claims were not being settled and where patients' accounts were not resolved. This situation brought about much dissatisfaction on the parts of both patients and physicians. Realizing the many administrative problems encountered by component committees, the state Committee recommended to the Board of Trustees that carriers be instructed to pay claims pending longer than 60 days at the prevailing rate they had established. In such situations, if the payment made was not satisfactory to the attending physician, he would be asked to reinitiate review through the respective component committee.

A similar recommendation was made concerning utilization claims with the exception that the carrier could request review by the state Committee after the 60-day period. Both recommendations were approved by the Board.

Questions of quality of care and practice patterns continue as an ongoing concern. In order to be effective, the Committee must address these questions and has encountered situations this year which have required subsequent referral to the Judicial Council and, subsequently to the Licensure Board.

The Committee noted increasing requests for assistance from the Part B Medicare Intermediary for review, which were answered. We are pleased to see more interest in peer review by the Medicare Program.

Some questions were raised this year relating to the appeals process. When committeess were established in the larger county societies and the trustee districts, the mechanism was structured so that an appeals mechanism would be available to both the attending physician and the submitting insurance carrier. This was done to make the opportunity available for a "second opinion" on an impartial basis. Claims to be reviewed on appeal are brought to the Committee and never initiated by it, as stated in operating guidelines.

The state Committee is not subject to pressure from any outside groups and all specialties and geographical regions of the state are represented in its membership. Emphasis is placed on resolving cases at the local level, which is where review ideally should take place. When local decisions are made with which the attending physician or carrier does not agree, the appeals mechanism allows the basic right to the appealer. The state Committee by no means feels that it is in a position to perform more insightful adjudication than local groups, but by its action as an impartial body, can and does render opinions based on *medical* evidence available and its best collective medical judgment.

If changes in the review mechanism are appropriate, we urge the membership to bring them to the attention of the House of Delegates. Our only intent is to perform those functions mandated by the House.

As Chairman, I would like to express my personal thanks to the members of the state Committee for long, hard travel hours and intense review time spent for the Committee's work.

Stuart Graves, M.D., Chairman

Recommendations, Reference Committee No. 4

Mr. Speaker, the Reference Committee recommends adoption of the Report of the Claims and Utilization Review Committee. The Reference Committee recognizes with appreciation the performance and dedication of the members of the Committee whose duties are mandated by this House of Delegates.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Committee on Community, Rural and Health Care of the Poor

The KMA Community, Rural and Health Care of the Poor Committee held two meetings this year. As you might have noticed from last year, the Committee's activities and responsibilities have been expanded at the request of the Board of Trustees to include health care of the poor.

This year the Committee has continued as liaison with the Division of Alcoholism and Drugs of the Kentucky Bureau for Health Services and with the University of Louisville, Department of Health, Physical Education and Recreation. This year the Committee will have in conjunction with these two groups, a scientific exhibit on drug and alcohol abuse. We are most hopeful that delegates will have the opportunity to stop by as we feel the exhibit will contain a good deal of valuable information. Educational materials will also be available to physicians which we hope will be helpful in the area of alcohol and drug abuse.

In addition to the exhibit, the Committee has actively pursued the idea of locating scientific papers on alcoholism, which can be published in *The Journal* of KMA. The Committee feels there have been a number of advances made in the area of drug and alcohol abuse which the average physician should be aware of and we are hopeful that this might be one way of bringing that information to our colleagues. Another area of continuing education we anticipate could be utilized is the Annual Meeting of KMA and the Committee has requested that the Scientific Program Committee consider having the subject of alcoholism and drug abuse as a topic for discussion next year.

The Committee continues its interest and involvement in highway safety and applauds the University of Kentucky School of Engineering and the University of Kentucky College of Medicine for their work with the Kentucky State Police in investigating recreational vehicle accidents. Kentucky highways carry a heavy number of recreational vehicles due to our strategic location for south bound traffic as well as our excellent park system. The University's study of accidents involving these vehicles is finding extremely important information which hopefully will be used in an effort to improve construction standards of the vehicle and requirements for licensing of their operators.

This year the Committee voiced an interest in learning more about the various programs now in operation in our state with regard to community and rural health.

As a result, each member of the committe was assigned a particular subject to investigate and report back on and I think everyone in attendance found these reports to be most informative. We were most fortunate to have William P. McElwain, M.D., Commissioner of the Department of Health Services, Bureau of Human Resources, in attendance to discuss with us some of the various programs implemented through his office. One area of discussion was the operation of various county boards of health. There was some feeling among the committee members that some local boards of health appeared not to be responsive to community needs and many times were virtually inactive. The Committee learned that it is up to county medical societies to appoint members to these boards which will actively participate in matters brought to them. As a result, the Committee urges that all county medical societies take a more active interest in the appointment of physicians to serve on these boards of health and become more aware of the various programs over which the boards have control.

Doctor McElwain also discussed the state's plans for participating in the National Immunization Program against the swine influenza virus. Your Chairman had the privilege of accompanying Doctor McElwain to a regional meeting in Atlanta last spring, at which plans for the immunization program were detailed. It is the Committee's opinion that the decision to immunize the entire population is medically sound and we were pleased to learn that the Board of Trustees had gone on record of endorsing the immunization program and offering their assistance in any way possible. By the time this report is read, the program will be fully operational and the Committee urges all Kentucky physicians to cooperate in any way possible in seeing that citizens of the state are immunized against this potentially fatal virus.

The Committee continues its interest in health manpower in rural areas and plans to invite representatives from both medical schools to future meetings to discuss possible avenues that the schools may wish to consider which might assist in attracting more physicians into the rural areas of our state.

We were also pleased to have at our last meeting, Doctor Homer Martin, who is the Chairman of the KMA Ad Hoc Committee on Mental Health and Mental Retardation. Doctor Martin reported to us on the activities of his committee in the area of mental health and we were impressed with the amount of work that Doctor Martin and his committee has done in this area. He reported that, although a few of the mental health programs did seem to be having some trouble, many more were filling a void by offering services to patients which might otherwise not be able to see a private physician and that those services should be continued.

To the members of the Committee, and representatives of the various groups that met with the Committee this year, I extend my sincere appreciation. For without their interest and active participation, the Committee could not continue its activities in our many areas of involvement.

Stephen B. Kelley, M.D., Chairman

Recommendations, Reference Committee No. 4

Mr. Speaker, the Reference Committee commends Doctor Stephen B. Kelley and those who served with him for their initiative in revitalizing the Committee on Community, Rural and Health Care of the Poor. The Reference Committee would emphasize that Doctor Kelley urges all county medical societies to take more active interest in the composition and activities of their local boards of health.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Committee on School Health, Physical Education and Medical Aspects of Sports

The Committee on School Health, Physical Education and Medical Aspects of Sports continues to sponsor, in August of each year, briefing sessions for football coaches on pre-season conditioning of football players and the importance of pre-season football examinations. This was done in various regions around the State. The Committee members also work with the Kentucky Association of Elementary School Counselors in developing programs concerning behavioral problems in children, as well as learning disabilities, as they relate to school health.

This was the fifth year that the Committee has sponsored a Medical Aspects of Sports Seminar. This annual seminar was changed this year to coincide with the dates of the Kentucky State Boys' High School Basketball Tournament and was held on the mornings of March 25 and 26 at the Executive Inn, Louisville, Kentucky. The Committee members arranged for sponsorship through small grants from Geigy Pharmaceuticals; Eli Lilly; E. R. Squibb; Merck, Sharp & Dohme; Smith, Kline & French; and Roche Laboratories. The entire program was done at no cost to the Kentucky Medical Association. The featured speaker for that program was Thomas Shaffer, M.D., who is one of the team physicians at Ohio State University and a member of the American Medical Association Sports and School Health Committee, having been former chairman of that committee. There were approximately 25 different scientific group sessions, as well as individual sessions for specific education of team physicians, high school trainers, and coaches, respectively.

Also, the Committee members have worked closely with the Kentucky High School Athletic Association on aspects of female participation in athletics and the hazards of making weight in high school wrestlers. A letter was prepared by this Committee and sent to every high school wrestling coach in the State by the Kentucky High School Athletic Association very clearly detailing to the high school wrestling coaches the dangers of rapid weight loss in young athletes so they might participate in a lower weight class in wrestling. Cooperation between our medical and their athletic agency, hopefully, has prevented some sports illnesses

that otherwise may have occurred due to this ill-conceived practice.

The Chairman is presently working with James Kurfees, M.D., of the University of Louisville School of Medicine, Department of Family Practice, in developing a sports medicine elective as an integral part of the Family Practice Program at the University of Louisville. This program is designed to be not merely a lecture program, but also to have on-the-field training of students with participating team physicians in the Greater Louisville area.

The philosophy of this Committee is to have preventive programs for our school administrators, coaches, and trainers and to continue to have our annual scientific program for physicians, coaches and trainers. The Committee will meet as needed to handle any individual programs that may arise within the coming year.

The Committee would like to thank President Hull and the Trustees of the Kentucky Medical Association, as well as KMA staff, for their continuing support of our Committee and our endeavors.

Ronald E. Waldridge, M.D., Chairman

Recommendations, Reference Committee No. 4

The Report of the Committee on School Health, Physical Education and Medical Aspects of Sports was reviewed. Mr. Speaker, the Reference Committee is pleased to note that Doctor Ronald E. Waldridge and his Committee have not only continued to pursue the improvement of school health, but have also worked on innovative new programs including a sports medicine elective in the Family Practice Program at the University of Louisville. Much has been accomplished for the youth of our state through the exemplary activities of this Committee.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Health Manpower and Placement Services Committee

The Committee's concerns this year were primarily with considerations of activities carried over from last year. Specifically, two recommendations were developed by the Committee and presented to the Board of Trustees for action on behalf of the Association. The first dealt with "direct supervision" by physicians over non-physician health personnel and "independent practitioners" and a recommendation concerning medical residency programs. It was the intent of the Committee that these recommendations be forwarded on for House of Delegates' action, and that the House in turn would consider them for possible legislative activities.

We were quite gratified to learn that the House did take affirmative actions on both these recommendations and that legislative considerations did ensue.

The first recommendation, concerned with non-physician health personnel and independent practitioners, related primarily to physicians' assistants. The recommendation ultimately called on the profession to oppose the development or recognition of **independent** "physician extenders" but to endorse the concept of their use when working under the supervision of a physician. After the 1976 General Assembly convened, this matter did become introduced as Senate Bill 27 which then followed a rocky course through the legislative process. Because of the extreme difficulty of correlating the interests of various affectd groups, this bill was not successful.

The second recommendation of the Committee called for the establishment of sufficient first year primary care residency positions equal to the number of annual medical school graduates. Senate Bill 28 was the product of this activity.

We are pleased to report the foresight of our state's legislators and commend them for passing this legislation which will create 76 primary care residency positions at the University of Louisville and the University of Kentucky over a two-year period. To implement this legislation an appropriation of $2,600,000 was allocated, and the program is to be coordinated by the Council on Public Higher Education.

Although the pressure of the Legislature has passed, our Committee looks forward to continued involvement on behalf of the Association in allied health care matters.

Joseph P. Hamburg, M.D., Chairman

Recommendations, Reference Committee No. 4

The Reference Committee recommends acceptance of the Report of the Health Manpower and Placement Services Committee and recognizes the continuing involvement of Doctor Hamburg and his Committee on behalf of the Kentucky Medical Association in the difficult area of allied health care.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the KMA Advisory Committee to KPRO

Since September, 1975, there have been many developments relating to PSRO, both on the national and local level. I shall not attempt to relate all such developments but will highlight some of the more significant ones.

National

With the passage of the Social Security amendments of 1976, PSRO funding is on firm grounds, and most importantly, the costs of PSRO review will be borne totally by the federal government. The practical import of this is that a hospital, **whether delegated or non-delegated,** will be reimbursed 100% for PSRO review costs. (At the present time, under the Social Security Administration's policies, private patients are bearing a significant proportion of the cost of utilization review of federal patients.)

The medical audit requirement of JCAH and PSRO requirements for such retrospective studies (MCE's) have been made congruent. A very significant benefit of this action will be that JCAH mandated review activities

will be largely supported by PSRO funds and personnel—again relieving hospitals of this financial burden.

The projected use of Social Security numbers as identifiers for physicians and patients has been dropped by HEW.

PSRO's have been tacitly given more leeway as to their choice of data processing subcontractors.

The timing of admission review has been relaxed—allowing up to three days for performance of admission certification.

There have been many other less significant policy decisions, virtually all of which tend to liberalize the local authority of PSRO's. It should be pointed out that virtually all of these concessions by HEW have come as a result of the active participation by physicians in the PSRO program.

Local

KPRO has compiled and set out for approval and modification 77 diagnostic criteria sets, which will be ready for use when KPRO review begins. The second group of diagnostic criteria are now under consideration.

By virtue of its President having been named a defendant in the lawsuits testing the constitutionality of the recently passed "malpractice act", KPRO is providing about half of the funds and personal efforts necessary to defend the act.

KPRO's plan for PSRO review was finally approved early this year by HEW. As all of us are aware, more than ten percent of practicing physicians objected to KPRO as not being representative of physicians in this state and, therefore, a poll was held to determine whether KPRO would be finally appointed as the conditional PSRO for the state of Kentucky. By a two-to-one majority, the physicians of the state affirmed their choice of KPRO to do the federally-mandated review.

KPRO will now become the conditional PSRO for the state, and review activities will begin, first with 13 representative pilot hospitals scattered throughout the state. It is projected that beginning February, binding PSRO review will be instituted, replacing current utilization review activities for Medicare payment purposes. Hospital review activities will be increased in a stepwise fashion until by the end of the first year of KPRO review, 85 (of 107) eligible hospitals will be under binding review.

Before review is instituted in any hospital, a Memorandum of Understanding will be executed with that hospital after conferences with the administration, medical staff, and Trustees of that hospital. These Memoranda will delineate the respective duties and functions of the hospital and KPRO relevant to the review process. These will not be contracts since either party can nullify the agreement at any time. They will, however, specify the rights and responsibilities of all parties involved in in-hospital review.

Prior to establishing PSRO review in any hospital, a hospital must choose between the delegated and non-delegated status. A chart comparing these options is appended.

KPRO will hold an election for Directors within 120 days of its notification of conditional status. The election will be held at an open annual meeting of the KPRO membership. Absentee ballots may also be procured as outlined in the KPRO Bylaws. Initially, the intention was to have this meeting coincident with the KMA Annual Meeting. Because of the delays imposed by the notification and polling process, the KPRO Annual Meeting will, this year, necessarily be sometime in late December or in January. The KPRO Nominating Committee, who will present a slate of recommended nominees, will be meeting during the KMA Annual Meeting on September 27, from 12 noon until 2:00 p.m., in the Mark Twain Room at the Ramada Inn (Hurstbourne Lane), to accept suggestions for nominations to the KPRO Board from KPRO *members*. (Other nominations than those provided by the Nominating Committee will be accepted by the KPRO Board pursuant to Article III of KPRO By-laws).

There will be many important activities and policies (such as data processing, review implementation, physician and coordinator seminars, long-term care review plans, etc.) which will be determined by the newly-constituted KPRO Board of Directors. It is hoped that all members will participate in the election process and the implementation of review as it proceeds in Kentucky. Membership in KPRO—assuring each physician a voice in the election of the Board and its subsequent activities—is open to all practicing physicians (M.D. and D.O.) who wish to sign a card stating that they approve the KPRO as the PSRO for the state and will cooperate in its activities. This membership may be cancelled or withdrawn at any time.

W. Neville Caudill, M.D., Chairman

Recommendations, Reference Committee No. 4

The Reference Committee has reviewed the Report of the KMA Advisory Committee to KPRO. The information contained within the report clarifies this rapidly evolving area of concern for physicians.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried).

Report of the Hospital Committee

Section Pertaining to Cost Awareness Plan Only

The Committee in the past few years has urged that hospitals provide information to medical staff members with regard to the cost of hospital services ordered for their patients. In light of today's rapidly escalating health care costs and with more public scrutiny being given health care through the news media, the Committee feels it is more important than ever to continue to urge that hospitals provide this information. In addition, we think it is imperative that the staff members utilize this information when presented to them, as we feel it could have an impact on the number of services routinely ordered, which would in turn be reflected in the total bill to the patient.

Recommendations, Reference Committee No. 4

The Report of the Hospital Committee, Page 18.1, paragraph three, pertaining to the cost awareness plan was reviewed, and the Reference Committee agrees with the report. In view of today's escalating health care

costs, it is important that hospitals make available essential information on patient costs to the members of their staff.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Resolution H

First Trustee District Peer Review Committee

WHEREAS, peer review committees have been established throughout the state to insure just and equal treatment for physicians and third party carriers, and

WHEREAS, dedicated physicians serve on these committees without compensation and recognition, many times at a hardship unto themselves, and

WHEREAS, the district or county peer review organization must determine from the presented facts if a given fee, length of stay, or need for hospitalization is justified, and

WHEREAS, since this determination may not be acceptable to the presenting party, the case will be referred to the Claims and Utilization Review Committee of KMA, and

WHEREAS, the state committee may reverse the findings of the district or county peer review committee, therefore be it

RESOLVED, that the Kentucky Medical Association direct the Claims and Utilization Review Committee of KMA to furnish to the district county peer review committee a concise but documented reason for its reversal of any decision of the local committee.

Recommendations, Reference Committee No. 4

Resolution H was reviewed and discussed. Mr. Speaker, the recommendations contained within this Resolution will improve communication and facilitate peer review established by the Kentucky Medical Association.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

Resolution U

Clark County Medical Society

WHEREAS, the Kentucky Medical Association is officially on record for repeal of PSRO, and

WHEREAS, the Kentucky Medical Association is also on record as endorsing PSRO by letter to the Kentucky Peer Review Organization, Inc., Louisville, Kentucky, therefore, be it

RESOLVED, that the Kentucky Medical Association be required to either take position one or two as listed above, so that all physicians in Kentucky will know exactly how the KMA stands on this issue.

Recommendations, Reference Committee No. 4

Mr. Speaker, the Reference Committee carefully studied Resolution U submitted by the Clark County Medical Society concerning the position of the Kentucky Medical Association in relation to KPRO and PSRO. The Reference Committee also reviewed actions of this House of Delegates in 1971, 1973, 1974, and 1975, and examined the actions of the KMA Board of Trustees in March, 1973, and April, 1974. The Reference Committee takes exception to Resolution U and finds that the Kentucky Medical Association is consistently on record opposing PSRO and also has implemented the instructions of this House of Delegates in working for the repeal of PSRO. At the same time the Kentucky Medical Association, its leadership, and this House of Delegates have recognized their responsibility to the people of Kentucky by seeking to place control of federally mandated peer review in the hands of physicians until PSRO can be repealed. Reference Committee No. 4 recommends that Resolution U not be accepted.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Mr. Speaker, I move the adoption of the report of Reference Committee No. 4 as a whole.

(The motion was seconded and carried.)

Mr. Speaker, I sincerely thank and express my appreciation to the members of this Committee, Doctors Richard D. Floyd, William E. Pearson, Fred A. Stine, and N. H. Talley, and Mrs. Laura Hamm for preparing this report.

REFERENCE COMMITTEE NO. 4

James P. Moss, M.D., Louisville, Chairman
Richard D. Floyd, M.D., Lexington
William E. Pearson, M.D., Owensboro
Fred A. Stine, M.D., Covington
N. H. Talley, M.D., Princeton

REFERENCE COMMITTEE NO. 5

Robert E. Smith, M.D., Covington, Chairman

Reference Committee No. 5 considered the following reports and resolutions:

20. Report of the Committee on Business Management and Services

22. Report of the Committee on Long-Term Health Care

28. Report of the Committee on Medicare and Other Governmental Medical Programs

29. Report of the Technical Advisory Committee on Physician Services (Title XIX)

31. Report of the Advisory Committee to Selective Service

35. Report of the Committee on Public Relations

Resolution A—Medicaid-Medicare (Garrard County Medical Society)

Resolution B—Survey of Physicians (Garrard County Medical Society)

Resolution C—Dual Fee for Same Service (Garrard County Medical Society)

Resolution D—Medicaid-Medicare (Laurel County Medical Society)

Resolution F—Patient Grievance Review Committee (Campbell-Kenton Medical Society)

Resolution I—Medicare Reimbursement Mechanism (Pennyrile Medical Association)

Report of the Business Management and Services Committee

The Business Management and Services Committee was formed five years ago for the purpose of investigating programs that would provide tangible benefits for KMA members. Since that time, numerous proposals have been discussed to include several insurance plans, travel programs, leasing arrangements, tax and cost control services, and trust information.

Programs felt to be beneficial to KMA members have been adopted. Those now in existence include:

1. Blue Cross-Blue Shield group insurance plan for members and their employees. This plan has two options: (a) Blue Cross-Comprehensive, Blue Shield-Schedule D with Major Medical; (b) Blue Cross-Comprehensive, Blue Shield-Usual, Customary and Reasonable with Major Medical.

2. Disability plan providing up to $500 per week in accident or sickness benefits. This policy is written with the Phoenix Assurance Company of New York through the A. P. Lee Agency in Louisville.

3. $50,000 accidental death and dismemberment travel accident insurance for KMA Officers, AMA Delegates and Alternate Delegates, KMA Delegates or their Alternates, KMA Committee Members, and KMA staff, under age 70, while traveling on Association business. The policy is written with the Lumbermen's Mutual Casualty Company through Mutual Underwriters in Louisville.

4. A comprehensive and flexible auto leasing plan for KMA members. General Leasing Corporation of Louisville administers this program, which includes leasing of cars; medical, surgical and laboratory equipment; and office furnishings.

This past Associational year, the Committee members received reports on these plans and also kept abreast of the KMA-endorsed trip, through Group Travel Unlimited, to the AMA Clinical Meeting in Hawaii. Approximately 50 people signed up for the trip giving KMA the equivalent of one complimentary air fare.

The members also studied a proposal for supplemental insurance benefits, but after comparing the benefits and costs with group insurance programs of AMA and the Southern Medical Association, decided a program of this type should not be endorsed by KMA at the present time.

Printed in the January, 1976, issue of *The KMA Journal* was a summary of programs in effect for KMA members, along with a reply form for use in making suggestions to the Business Management and Services Committee on potential programs members would like to see investigated by the Committee. No replies were received.

I would like to thank the members of this Committee for their service during this Associational year.

Harold D. Haller, M.D., Chairman

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed the Report of the Committee on Business Management and Services and commends the Committee for a job well done. We recommend that the report be accepted.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Committee on Long Term Health Care

The requirement mandated by federal regulation for a full-time medical director in skilled nursing facilities occupied the main concern of our Committee. On a national level, in spite of repeated and intensive attempts by the American Medical Association, the American Health Care Association, and numerous individual groups and organizations, this requirement was not modified. Most all parties to such discussions would not disagree with the theoretical value of a full-time medical director. Exception to the requirement, however, centers around the financial realities associated with procuring and maintaining a director.

The Committee's mandate with regard to this requirement from both the House of Delegates and as we perceived it was one of education in a working context. In cooperation with the Kentucky Association of Health Care Facilities, the Committee, on behalf of KMA, sponsored a Seminar on the "Role of the Medical Director in Long Term Facilities" which was held on February 26.

Participating in this Seminar were Mr. Tom Anton, representing the Office of Nursing Home Affairs, Department of Health, Education and Welfare, Ms. Anita Lann, representing the American Health Care Association, Mr. Tom Fox, an attorney for the American Health Care Association, and Carl F. Page, M.D., a speaker of national prominence and expert in this particular field.

This Seminar was particularly well attended and was quite informative. In excess of 100 persons registered for the meeting including more than ten physicians. Primarily, the audience was made up of nursing home administrators and related personnel. Major topics addressed during the Seminar were the federal regulations and guidelines pertaining to the medical director, the relationship of the administrator of a nursing home to the medical director, legal considerations, and the role of the medical director.

The sessions were conducted in an informal manner and the presentation by Doctor Page was particularly well received as his talk was based on his personal experiences as a medical director for a skilled facility in his hometown of Lubbock, Texas. We would like to acknowledge with appreciation the fine assistance from the officers and staff of the Kentucky Association of Health Care Facilities and based on the success of this Seminar look forward to working together with this group in the future.

In addition, we would encourage all physicians who are associated with long-term care facilities to become familiar with the activities of KAHCF.

As mentioned previously, the requirement for a medical director still remains in effect although enforcement of it has not been stringent. We would welcome any questions or comments on the Committee's activities and

further areas of involvement on behalf of the Association.

Harold B. Barton, M.D., Chairman

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed the Report of the Committee on Long-Term Health Care and recommends the report be accepted.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Committee on Medicare and Other Governmental Medical Programs

Resolution K, adopted by the 1975 KMA House of Delegates, indicated dissatisfaction with various segments of the Part B Medicare Program. The Committee on Medicare and Other Governmental Medical Programs was directed to investigate issues brought up by this resolution and to seek and suggest ways to resolve them. Based on a similar resolution passed by the previous year's House of Delegates, the Committee determined the best approach would be to present these questions to Medicare officials in an open meeting.

Other related questions developed by the Committee and from solicitation of the general membership were discussed and formalized in the Committee's first meeting. Because a major question appeared to be the amount of flexibility allowed the intermediary in operating the Medicare Program, it was agreed that the questions would first be posed to Social Security representatives. The AMA Washington Office was contacted for advice on the proper person within the Social Security Administration to contact, and referred the Committee to the Region IV Office in Atlanta. The questions were subsequently submitted to Mr. Douglas M. Richard, Regional Representative of the Region IV Office. On the basis of Mr. Richard's responses it was determined that a meeting was indicated with him and with representatives of the Metropolitan Medicare Office.

At the second meeting, which was held in Lexington, the Committee was given a tour of the Metropolitan Office and its Medicare operations. Following this tour the Committee met formally with Mr. Richard, Mr. Ben Sciantarelli, Manager of the Metropolitan Office, and other Metropolitan and Bureau for Health Insurance representatives. Questions asked and replies given to issues of most interest to the general membership are as follows:

(1) **What degree of flexibility is allowed a contractor such as Metropolitan as an intermediary for the Medicare Program?**

Contractors are given a high degree of flexibility. Obviously, they are required to adhere to the law, regulations, and official instructions of the Bureau for Health Insurance. There are wide areas that are not covered by such guidelines in which the contractor is expected to exercise its good judgement, but it was the Committee's opinion that these areas are fairly restricted.

(2) **There is some concern over the amount of time that elapses between physician profile updates.**

Medicare physician profiles or reasonable charge screens are updated once a year. This update is accomplished shortly after July 1 of each year and is fixed by regulation.

(3) **The Metropolitan Medicare Office uses the 1965 New York Relative Value Scale for coding procedures. Can this be changed to a more modern five digit code?**

Until recently the Bureau for Health Insurance had a moratorium on revisions of procedural terminology in coding systems. These restrictions will soon be lifted and more modern criteria will be published in the near future.

(4) **Are Medicare intermediaries required to use medical association peer review?**

The BHI contract with Metropolitan stipulates that Metropolitan will develop appropriate relationships with medical associations, and it is implied that this includes peer review. When HEW sees evidence of little effort on the part of the carrier to work with the medical society, then a closer relationship is encouraged. (The Committee was pleased to note an increased use by the Metropolitan Office of the KMA review mechanism in the past year and a half).

The two major issues that came out of these discussions related to the dividing of the state into areas for payment purposes and the reimbursement received by new physicians. It was agreed to request additional information from the Metropolitan Office on both these subjects for further evaluation. This was received and considered at the third meeting of the Committee.

With regard to new physicians, the Committee had requested information comparing the prevailing fees at the 50th percentile for new physicians to prevailing fees at the 75th percentile for established physicians, on ten common medical procedures. In addition to this fee data, the Committee was advised that, by regulatory guidelines, new physicians were paid the lowest of three charges: The actual physician's charge as billed, his customary charge at the 50th percentile level, or the prevailing charge. New physicians are paid at this rate for one year or until the carrier makes the annual fiscal year fee revision and has three months' charge experience for the individual new physician. From the fee data gathered on these ten common procedures, there did not appear to be a great variation, generally, between what established physicians were paid and what new physicians received.

Similar data was supplied by Metropolitan on ten common medical procedures that grouped physicians by each of the three areas and by "physician groupings". The Committee was furnished with a list of those physicians in the state which fell in the respective payment areas, as well as a list of "physician groupings". Generally, physicians were grouped into medical specialties, surgical specialties, and other specialties.

As noted in the meeting with Mr. Sciantarelli and Mr. Richard, there appeared to be a trend of fees billed by physicians in three areas coming closer together. Mr. Richard had indicated that it was possible the Bureau for Health Insurance would allow single state billing and had, in fact, authorized one pilot project for this in one state. The most notable feature of the data supplied, which gave the prevailing fee for a given

procedure in each of the three areas, was that physicians in Area III routinely had the lowest prevailing rate.

After discussion the Committee agreed that if single state-wide fees were used for payment purposes the immediate result would be the raising of fees for all physicians in Area III, and felt that if this method of payment were used it would be a definite beneficial step. The Committee therefore recommends to the House of Delegates that the Medicare Part B intermediary be urged to reimburse physicians on the basis of state-wide fee data subject to final approval by KMA after review of projected single-state area payments in comparison with existing charge levels for the current payment areas.

If upon review of this data it appears to be inappropriate to reimburse all physicians in this manner, then this position should be reconsidered.

The Committee acknowledges the attitude of cooperation and assistance expressed by Mr. Sciantarelli and the Regional Bureau of Health Insurance representatives and commends them for the helpful manner in which they entered these discussions.

Frank M. Gaines, Jr., M.D., Chairman

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed the Report of the Committee on Medicare and Other Governmental Medical Programs. There is a majority report and a minority report on this section. The majority report recommends its acceptance.

Mr. Speaker, I move the adoption and implementation of the majority report.

The motion was seconded. The Speaker then recognized W. Grady Stumbo, M.D., Delegate from Knott County, who requested that the motion be amended to include the following statement: "Resolved, that the KMA House of Delegates direct the KMA Board of Trustees to ask the Medicare Intermediary in the Commonwealth to seek a single State Classification for physician reimbursement."

The motion as amended was seconded and carried.

Minority Report of Reference Committee No. 5

The minority opinion of Reference Committee No. 5 accepts the Report of the Committee on Medicare and Other Governmental Medical Programs for informational purposes only and recommends that Paragraph One, Page 28.4, not be accepted as the policy of KMA for reasons that a single state-wide fee schedule, as discussed in this Committee's report, is too vague and also is in conflict with the usual, customary and reasonable concept.

Report of the Technical Advisory Committee on Physician Services (Title XIX)

The Technical Advisory Committee on Physician Services (Title XIX) continued to represent KMA to the Medical Assistance Program this year in three regular Committee meetings, three meetings of the Medical Assistance Advisory Council, and several informal meetings, in addition to numerous telephone calls and related correspondence. Through the years the Committee has seen the Medical Assistance Program undergo fairly constant evolution, some of which has been of a beneficial nature, and some of which we can only classify as ultimately detrimental to the Program's aims. In this context, the Committee has worked diligently to give voice to what were felt to be the best interests of Kentucky patients and, secondarily, the best interests of organized medicine.

Within the constraints imposed by Federal regulations, state statutes, and state regulations, the Committee has attempted to achieve numerous specific changes to the Program. Unless each KMA member had a good working knowledge of these constraints and the manner in which the Program operates, it would be difficult to try to describe what such attempts involved and the process which must be followed. Some appreciation of the Committee's activities, however, may be gained from a description of a few outstanding situations which were experienced.

In one instance a situation came to the Committee's attention where Certified Registered Nurse Anesthetists in the employ of physicians were the only individuals supplying anesthesiology services in that particular area of the state. Because the CRNA's were employed by physicians and not a hospital, the physicians nor the CRNA's could be reimbursed through the Medical Assistance Program.

After negotiations, the Advisory Council agreed that the physician should be allowed to act as a "vendor" and charge for CRNA services in the same manner as is being done by hospitals, but unfortunately, no provision was ever made for these payments by the Program.

On two occasions the Committee was asked to make recommendations on the suspension of a physician for participation in the Program which, on the basis of records compiled over a six-month period in each case, was done. In this regard, it should be noted that there are very definite procedures that have been approved in the past by both the TAC and the Council for suspension of individual physicians.

Under the Freedom of Information Act, news media of Jefferson County had requested information relating to the total amounts paid to individual physicians, hospitals, and dentists by the Medical Assistance Program. After alerting KMA, this information was released and, from this situation, the Committee recommended to the Council that in any instance where such information is requested, the individual involved be notified beforehand of the release, and be provided with the same information. This was approved by the Council.

In the past few years, the Kentucky Medical Assistance Program has been working toward the establishment of the Medicaid Management Information System, a sophisticated recording, reporting, and claims payment process that is designed to make the Title XIX Program more efficient. Of major interest to our Committee were revised billing forms that had been developed, which had some objectionable features. After very careful study and

action by the Committee, this form was revised, the major features of which would be that patients would retain program identification numbers from month to month rather than being changed monthly, and that the physician is not required to personally sign the claim form to receive payment. This information system will not be implemented for some months, but the Committee was advised that prior to the implementation date a series of seminars will be held across the state for informational purposes for individuals participating in the program.

To bring to the attention of the Council members the economic problems faced by regular physician participants, information was requested and received on physician charges. One notable element of data was the fact that the average payment in 1974-75 for a brief and routine followup visit was $5.79. This was not the maximum prevailing fee, but an average of all fees. This figure was contrasted with routine fees charged to private paying patients of from $8.00 to $15.00 for the same service.

Through the efforts of a number of pediatricians in this state and the physician representative to the Council, attention was directed to the fact that the Medical Assistance Program only allows payment up to 21 days for hospitalization of acutely ill children and neonates in tertiary care centers. Pending further study of actual costs involved, the Council was receptive to increasing the allowable payment period to 42 days and to extend this allowance to all hospitals rather than restrict it to tertiary care centers.

A private practitioner contacted the Committee who was concerned over the fact that no reimbursement could be received for allied personnel working in his office, although similar individuals could be paid working in comprehensive care centers, for example. This has been a matter of some ongoing concern of the Committee, and it was considered by the Program at the Committee's insistence. The Committee learned that there are regulations which do not allow payment for personnel in private offices, although they can, in fact, be paid for services rendered in state-funded centers when their work is directed by a physician.

The Committee saw strong efforts from individual Technical Advisory Committees, the Council, and the Program to establish an advisory group for Home Health Care. This was strongly opposed by the Physician Technical Advisory Committee as an unwarranted precedent because there was no statutory provision. In addition, it was the Committee's feeling that this group was not widely representative either from the standpoint of persons actually engaged in home health care or expenditures made by KMAP. This subject later appeared in bill form in the Kentucky General Assembly, and was finally defeated.

Two other areas of concern which were translated into legislative action concerned the matter of reimbursement for services rendered by nurses and medical students in neighborhood health organizations and clinics and the creation of a Technical Advisory Committee on Primary Care.

S.B. 195 provided for establishment of a payment mechanism for clinics operated as described, where the physician would rotate between two or more such organizations. This did pass in the Legislature.

H.B. 36, which also passed, provided for the establishment of a Technical Advisory Committee on Primary Care consisting of five primary care "providers", two of whom must represent licensed HMO's. These individuals are to be appointed by the Governor and the Committee is maintaining close watch on this activity. It is the Committee's feeling that this also constitutes an unwarranted precedent in that another area of Program expenditures has been approved in the absence of any widespread definition of primary care and without any specification as to who "providers" of primary care are. This concern extends to the fact that such "providers" might very well be non-physicians who presumably would be able to receive payments for the same services rendered by physicians, but at a higher rate.

The Committee urges all members to relate any situations encountered through participation in the Medical Assistance Program which are of widespread concern to the profession that the Committee might have a hand in resolving. As Chairman, I would like to thank the members of the Committee for their long, untiring efforts on behalf of the membership.

H. Burl Mack, M.D., Chairman

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed the Report of the Technical Advisory Committee on Physician Services (Title XIX) and recommends the report be accepted and that the Committee be commended for its fine work.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Advisory Committee to Selective Service

The purpose of this quasi-governmental Committee is to maintain as much as possible an appropriate balance and distribution of medical personnel between our civilian population and the Armed Forces.

With the absence of a draft for physicians, dentists, or allied specialists, it was unnecessary for the Committee to meet during this Associational year.

The Committee members and Colonel Taylor Davidson and his staff with the State Selective Service office have been most helpful and cooperative.

Russell H. Davis, M.D., Chairman

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed the Report of the Advisory Committee to Selective Service and recommends that the report be accepted.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Committee on Public Relations

The Public Relations Committee has completed an extremely busy year. We feel that our efforts were

worthwhile, based on the successful passage of the professional liability insurance law, which was the area the committee was most deeply involved in.

We interviewed several public relations firms in an effort to develop a wide-ranging, indepth public relation campaign throughout Kentucky which would provide information regarding the many problems, both current and potential, that would have been faced by the consumer if relief in the field of malpractice premium cost was not obtained.

The public relations firm was engaged and your Chairman, Committee members, and staff became deeply involved in an extensive public education campaign. The campaign consisted primarily of pamphlets which were sent to each physician for office display; large posters placed in strategic locations around the state; and periodic newspaper advertising. We learned that the materials did compel a number of citizens in Kentucky to write to their legislators which undoubtedly had effect on the final outcome of the Senate Bill 248 and 249.

The Committee on Public Relations usually has the responsibility of helping coordinate the sponsorship by KMA of three seminars for office assistants during the associational year. These are designed to help office assistants deal more effectively without patients. The program has been successful in the past but this year due to the extensive involvement of officers and staff in the Legislature, they were not held. We are hopeful these programs will be reinstituted next year.

The Practice Management Workshop was held this year in April and was also a responsibility of the Committee on Public Relations. For the third straight year we received outstanding response from those in attendance at this workshop and certainly believe this is a program that should be continued in the years ahead.

These are just a few of the highlights of this past associational year concerning the work of our Public Relations Committee. I wish to take this opportunity to thank members of the Committee for serving and for their excellent recommendations and to urge each member of KMA to actively participate whenever possible in public relations programs to improve the image of our profession.

Laszlo Makk, M.D., Chairman

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed the Report of the Committee on Public Relations. The Reference Committee would like to commend the Public Relations Committee for the excellent work it performed during the past Associational year, noting particularly the work relating to liability insurance legislation, the seminars for office assistants, and the Practice Management Workshop.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Resolution A

Garrard County Medical Society

WHEREAS, the Medicaid and Medicare programs have, since their inception, been fraught with problems for the physicians, and

WHEREAS, physician profiles are not frequently updated to reflect normal changes, and

WHEREAS, rural physicians, with similar training and providing similar services, usually receive less in fees than their urban counterparts, and

WHEREAS, the Kentucky Medical Association Board of Trustees bowed to their action by supporting a single key program for conducting Standards of Care throughout Kentucky, and

WHEREAS, the recruitment and retention of physicians in rural areas are vital to Kentucky, and

WHEREAS, the Kentucky Medical Association professional dues and assessments are similar for both rural and urban physicians, and

WHEREAS, the Kentucky Academy of Family Physicians' House of Delegates at their meeting in May 1976 went on record as being in favor of reimbursement of physicians for their usual, customary and reasonable fees for services billed to the Medicaid-Medicare programs without regard to geographical location, and

WHEREAS, the Kentucky Medical Association has already gone on record as being in favor of reimbursement of physicians at their usual, customary and reasonable fees for services billed to Medicaid-Medicare programs without regard to geographical location, be it

RESOLVED, that the Kentucky Medical Association Board of Trustees hold necessary meetings, contact the appropriate organizations and work also for the reimbursement of physicians at their usual, customary and reasonable fees for services billed to the Medicaid-Medicare programs without regard to geographical location.

Resolution D

Laurel County Medical Society

WHEREAS, the Medicaid and Medicare Programs in Kentucky have, since their inception, been fraught with problems for the physicians, and

WHEREAS, physician profiles are not frequently updated to reflect normal changes, and

WHEREAS, rural physicians, with similar training and providing similar services, usually receive less in fee than their urban counterparts, and

WHEREAS, the KMA Board of Trustees are now, by their action of supporting a single KPRO organization for Kentucky, acknowledging "Standards of Care" throughout Kentucky, and

WHEREAS, the recruitment and retention of physicians in rural areas is a priority for Kentucky, and

WHEREAS, it is now possible for the state of Kentucky to be considered one geographic area, and

WHEREAS, KMA dues and assessments are similar for both rural and urban physicians, now therefore be it

RESOLVED, that the Kentucky Medical Association House of Delegates direct the KMA Board of Trustees to hold the necessary meetings, to contact the appropriate organizations, and to work for reimbursement of physicians at their usual and customary fees for services billed to the Medicare/Medicaid Programs without regard to geographic location.

Recommendations, Reference Committee No. 5

Reference Committee No. 5 considered Resolution A, Medicaid-Medicare, introduced by the Garrard County Medical Society, and Resolution D, Medicaid-Medicare, introduced by the Laurel County Medical Society, simultaneously because of the similarity of their contents. The KMA has previously accepted the same position as requested by these resolutions. Therefore, Reference Committee No. 5 recommends that these resolutions be accepted to reaffirm KMA's position.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

Resolution B

Garrard County Medical Society

WHEREAS, the Bureau for Health Services of the Department for Human Resources Commonwealth of Kentucky is circularizing the physicians of the Commonwealth for laboratory information, and

WHEREAS, this appears to be another attempt of Government to interfere in the private practice of medicine, and

WHEREAS, in its correspondence the Bureau appears to infer that legislation has made our cooperation mandatory, and

WHEREAS, this subterfuge is demeaning to the Commonwealth and its physicians, and

WHEREAS, due to the above reasons the Kentucky Academy of Family Physicians at their recent House of Delegates meeting in May 1976 resolved that physicians of the Commonwealth of Kentucky do not cooperate with the Bureau for Health Services until their method of obtaining information regarding laboratory services is amended and their true purpose in attempting to gather this information is stated, and

WHEREAS, the Kentucky Academy of Family Physicians House of Delegates further resolved that all future surveys of physicians be cleared through the Kentucky Medical Association and/or the Kentucky Academy of Family Physicians, therefore be it

RESOLVED, that the Kentucky Medical Association direct the KMA Board of Trustees to alert Kentucky physicians about surveys of this nature which may infringe on the function of physicians, and be it further

RESOLVED, that the Kentucky Medical Association go on record as being in favor of the resolution which was passed by the Kentucky Academy of Family Physicians House of Delegates that stated, "that physicians of the Commonwealth of Kentucky do not cooperate with the Bureau for Health Services until their method of obtaining information regarding laboratory services is amended and their true purpose in attempting to gather this information is stated" and "all future surveys of physicians be cleared through the Kentucky Medical Association and/or the Kentucky Academy of Family Physicians."

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed Resolution B, Survey of Physicians, introduced by the Garrard County Medical Society, and recommends it be accepted.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

Resolution C

Garrard County Medical Society

WHEREAS, the Kentucky Academy of Family Physicians has been opposed to a dual fee concept for the same service, and

WHEREAS, we have repeatedly gone on record as being in favor of usual, customary and reasonable reimbursements, and

WHEREAS, this type of reimbursement would only divide our membership, and

WHEREAS, the Kentucky Academy of Family Physicians House of Delegates at its recent meeting, May 1976, did go on record as being opposed to any dual fee concept or in practice, therefore be it

RESOLVED, that the Kentucky Medical Association direct their Board of Trustees to hold the necessary meetings, contact the appropriate organizations and to work for usual, customary and reasonable reimbursement and, if they can, go on record as being opposed to any dual fee program in concept or in practice.

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed Resolution C, Dual Fee for Same Service, introduced by the Garrard County Medical Society, and recommends that this resolution not be accepted because of the vagueness of the terms and the lack of a definition of the "dual fee concept."

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried by a vote of 61 to 23.)

Resolution F

Campbell-Kenton Medical Society

WHEREAS, since federal and state government interference with the provision of medical care for patients in the State of Kentucky is developing the capability for possible harm to patients through refusal to pay for needed hospitalization days for patient care (i.e. premature dismissal from the hospital or by refusal to pay for hospitalization; preadmission screening) by a review process that does not see and evaluate the patient, and

WHEREAS, the Federal Government through its KPRO contracts has the potential ability to force physicians to practice "cook book" type of medicine as outlined in its PSRO and utilization review norms, standards, and criteria of medical care, therefore be it

RESOLVED, that the KMA House of Delegates direct the KMA Board of Trustees to set up a patient grievance review committee in each trustee district which will notify the citizens of that district of the willingness of this committee to review for a patient or his family any denial of payment by a federal, state, or governmental agency or contracting agent thereof (such as a PSRO) for hospital, office, outpatient, or nursing home medical

care or service. If this committee judges after review of all the facts and testimony presented to it by the patient and the involved governmental agency that the patient was wrongfully denied payment or provision of medical care or service, it will so notify the patient of its decision and of its willingness to assist the patient in his available administrative appeals or court actions if necessary, and be it further

RESOLVED, that the KMA will assist these patient grievance committees with administrative and legal advice when necessary, and be it further

RESOLVED, that these patients grievance review committees may charge a sliding scale fee where necessary to reimburse physician committee members for their time, travel, lodging, food, and necessary secretarial and/or administrative personnel.

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed Resolution F, Patient Grievance Review Committee, introduced by the Campbell-Kenton Medical Society. After hearing the discussion in the Reference Committee meeting, it was felt that adequate review mechanisms exist in the claims and utilization review structure of KMA. Reference Committee No. 5, therefore, recommends that this resolution not be accepted.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Resolution I

Pennyrile Medical Association

WHEREAS, the Medicare for the Commonwealth of Kentucky has repeatedly demonstrated bureaucratic and arbitrary means in establishing reimbursement schedules, and

WHEREAS, these reimbursement schedules and repayment programs are arbitrarily established by minor bureaucratic officials without justification hearings or reasonable mechanisms, therefore be it

RESOLVED, that the Kentucky Medical Association House of Delegates instruct its staff and Board of Trustees to immediately form a special ad hoc committee to review in detail, all of the Medicare reimbursement schedules and repayment mechanisms, and be it further

RESOLVED, that this committee report to the next House of Delegates its findings for further action.

Recommendations, Reference Committee No. 5

Reference Committee No. 5 reviewed Resolution I, Medicare Reimbursement Mechanism, introduced by the Pennyrile Medical Association. The Reference Committee recommends that this resolution not be accepted since the Committee on Medicare and Other Governmental Medical Programs is already in existence to perform these functions.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Mr. Speaker, I move the adoption of the Report of Reference Committee No. 5 as a whole, as amended.

(The motion was seconded and carried.)

Mr. Speaker, I would like to thank Doctors Peter C. Campbell, Jr., Henry F. Chambers, C. Douglas LeNeave and R. D. Pitman, and a special thanks is given to Mrs. Doris Crume for her perseverance and knowledgeable assistance in preparing this report.

REFERENCE COMMITTEE NO. 5

Robert E. Smith, M.D., Covington, Chairman
Peter C. Campbell, Jr., M.D., Louisville
Henry F. Chambers, M.D., Campbellsville
C. Douglas LeNeave, M.D., Mayfield
R. D. Pitman, M.D., Williamsburg

REFERENCE COMMITTEE NO. 6

C. Nicholas Kavanaugh, M.D., Lexington, Chairman

Reference Committee No. 6 considered the following reports and resolutions:

10. Report of the Judicial Council

11. Report of the Rural Kentucky Medical Scholarship Fund

23. Report of the Physician-Attorney Liaison Committee

24. Report of the KMA-Kentucky Nurses Association Joint Practice Committee

40. Report of the Committee to Study the Constitution and Bylaws

41. Report of the McDowell House Board of Managers

Resolution E—Unified Membership (Campbell-Kenton County Medical Society)

Resolution G—Possible Death of Critically or Terminally Ill Patients (Campbell-Kenton County Medical Society)

Resolution K—Re-Apportionment of KMA Board of Trustees (Jefferson County Medical Society)

Resolution M—KMA Election by Total Membership (Jefferson County Medical Society)

Resolution N—Amendment to Article X—Referendum (Jefferson County Medical Society)

Resolution V—Composition of the House of Delegates of KMA Ex-Officio Members (Pennyrile Medical Society)

Report of the Judicial Council

An apparent increasing need for the Council's activities was realized this year which necessitated more meetings of your group than in the past. It is our conviction that this greater degree of activity could be attributed in large part to a greater public concern and awareness of medical affairs promulgated by this year's public focus on the liability insurance situation. A total of six meetings were held this year, where matters were considered that had been initiated from numerous sources which included individual patients, individual physicians,

county medical societies, the Consumer Protection Division of the State Attorney General's office, the AMA, the Department of Health, Education and Welfare, and hospitals. Liaison functions were maintained in relation to the Council's actions with different internal and external agencies which included county medical society grievance committees, the peer review system, the Kentucky Hospital Association, and the Kentucky State Board of Medical Licensure.

In addition to consideration of issues directly related to ethics and conduct, the Council acts as the administrator of a general complaints system at KMA and receives an average of 10-15 calls or letters a week, mostly from patients.

Several major topics were considered that are probably of interest to the general membership and applicable to a plethora of situations the average physician often encounters. Further, a great many situations were adjudicated of a more routine nature that were point specific and not of such comprehensive interest.

One pertinent concern considered by the Council involved physician advertising. This is an ongoing concern not only of the Council, but of every physician, and assumes particular importance in relation to a national judicial dispute between the Federal Trade Commission and the AMA. The Council's opinion was an extension of that of the AMA Judicial Council, which generally stipulates that physicians should refrain from overt advertising in any media, especially in a manner which might elicit comparisons of purported competence.

In a related opinion of a more specific nature which substantiates this view the Council determined that straightforward information furnished to patients should generally be restricted to the type of practice, the physician's appointment schedule, office hours, and fees, including policy on insurance and billing procedure.

One matter came to the Council's attention by way of a county medical society relating to the location of a physician's office in a hospital or adjacent facility, and the opinion given on this matter is as follows:

"It is unethical for physicians to have their offices located in the hospital building itself or immediately adjacent to it unless the hospital offers office space to all physicians in the community. The consensus of the Council was that if the hospital owns the building, no matter where it is located in relation to the actual hospital building, it would be considered to be unethical for physicians to have officers there unless all medical staff members in the community were given the same opportunity to rent office space in the building, but it is not unethical for some physicians to accept a general offer of space to the medical staff."

This opinion applies to all physicians engaged in private practice in the medical community. It is recognized that many physicians are now engaged in practice under a contractual agreement with a given hospital or other health care facility for a specified type of service in which an office is furnished as part of the arrangement. This is not in conflict with the above opinion.

Two issues relating to testing laboratories were submitted for opinions. In the first instance, the local testing laboratory had invited physicians to tour the facility and a question was raised as to the propriety of this invitation from the standpoint of advertising ethics. It was the Council's opinion that such a tour should not be considered unethical for local physicians who routinely utilize the lab, but felt that the issue should be finally decided by the county medical society, based on their overall knowledge of the lab's activities. The second matter was concerned with the fact that a patient had ordered lab tests himself and, through the Council's involvement, an opinion was developed based on existing statutes which maintained that medical laboratories examining human specimens could do so only at the request of a physician.

The Council became involved in one notable incident which set a precedent in that it was a joint effort of the Council and the peer review system relating to a physician dispensing pharmaceuticals from the physician's office. The Council rendered the opinion that:

"Physicians should avoid regular dispensing and retail sale of drugs to patients wherever the drug needs of patients can be adequately met by local, ethical pharmacies."

In this situation, the Council was gratified that office dispensing was suspended voluntarily.

The advertising of health maintenance organizations was a continuing concern of the Council, which still awaits guidelines to be promulgated from the State Department of Insurance. Careful consideration will be given to such guidelines, when they are forthcoming, for comparison with traditional ethical standards.

Inevitably, the Council becomes involved with activities of third parties and, in one instance, was instrumental in restraining the actions of one insurance company which had referred a patient to another physician for consultation without the knowledge or consent of the attending physician.

Space limitations will not permit a full address of the many other minor matters the Council reviewed, but included were such issues as:

—The encouragement of physicians to submit itemized bills on Medicare claims showing date, place, description of each service, and the fee for service rendered.

—Continued activity through local county societies in review of clinics which perform abortions to assure conformity with the KMA adopted guidelines.

—Assistance to a patient in obtaining a "second opinion."

—Complaints concerning "missed diagnoses" which were referred to medical centers. In most cases, it eventually developed that the primary diagnosis was clouded by several concurrent medical problems.

—A patient question of personal conduct of a physician which, upon investigation, appeared to be substantiated. This was referred to civil authorities.

—An intensive investigation that required more than three months' time to try to determine the identity of an attending physician against whom a patient complaint was made, with no success or continued interest by the patient.

The Judicial Council oftentimes finds itself in a utilitarian role on behalf of the Association in issues that are generally related to the medical profession. As an indication of this type of involvement, the Council was questioned concerning the propriety of listing the names of non-medical practitioners who did not meet qualifications for national certification in a state directory for

the Kentucky Speech and Hearing Association. A recommendation was rendered in consultation with the Kentucky Ear, Nose and Throat Society.

Of considerable interest this year to the Council was its involvement with and representation on the Ad Hoc Committee to Study the Overview of KMA Peer Review Activities. In spite of a clamor from some groups, it is the Council's opinion that a great deal is being done to "police the profession," and the Judicial Council is very pleased to be a part of this effort on behalf of the Association.

The Council is indebted to the members of the Board of Trustees for their individual assistance and cooperation in the investigation of complaints at the local level.

Much thanks must be expressed to the Council members who gave ungrudgingly of their time and efforts during this year of heightened activity, and appreciation is also expressed to our legal counsel, Mr. Carl L. Wedekind, and Mrs. Shirley Roessler of the KMA staff for their dedicated work.

James O. Willoughby, M.D., Chairman

Recommendations, Reference Committee No. 6

Reference Committee No. 6 considered the Report of the KMA Judicial Council. The Committee noted with approval the numerous meetings and activities that the Judicial Council had found itself involved in. We particularly recommend to the attention of the House an appreciation that its Judicial Council frequently finds itself in a utilitarian role on behalf of the Association on issues that are generally related to the medical profession.

Again, much thanks must be expressed to the Council members who give increasingly of their time and judgment, and appreciation is also expressed to our legal counsel, Mr. Carl L. Wedekind, Jr. and to Mrs. Shirley Roessler of the KMA staff for their dedicated work.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Rural Kentucky Medical Scholarship Fund

At the 30th Annual Meeting of the Board of Trustees of the Rural Kentucky Medical Scholarship Fund held on May 12, 1976, a total of 42 new and renewal loans were approved amounting to $147,000. Eighteen applicants were approved for loans for the first time, which is a new record for the Fund. The Scholarship Board, in approving these loans, now has a record of having assisted a total of 407 students.

The Fund, which was established in 1946 as a means of providing a better distribution of physicians in rural Kentucky, has a total of 204 physicians in practice in 86 Kentucky counties, with 22 serving in designated "critical" counties.

Loans up to $3,500 per year are available to medical students who are residents of Kentucky, and who agree to practice in an approved area of the State one year for each loan received. Forgiveness features are applicable to recipients who establish practice in designated critical counties or serve in the Kentucky Public Health Service.

In addition to loans to students, the Fund has an Establish Practice Loan of $5,000 to physicians entering practice for the first time in an approved critical rural area of Kentucky. The Fund will forgive $1,000 of this amount for each year of practice in an approved critical rural area.

All loans and contracts are processed at the KMA Headquarters Office. Progress reports are secured on students in medical school, and contact is maintained with interns, recipients in residency training or the armed services, and past recipients in practice. The Louisville Trust Company serves as Fiscal Agent for the Fund.

Doctor Simpson, in noting the success of the program over the past 30 years, expressed particular appreciation for the interest and support of Governor Julian M. Carroll, Commissioner William P. McElwain, M.D., and the members of the Kentucky General Assembly.

Gaithel L. Simpson, M.D., Chairman

Recommendations, Reference Committee No. 6

Reference Committee No. 6 next reviewed the Report of the Rural Kentucky Medical Scholarship Fund, and present to give a report of the continued worthiness of this endeavor was the Vice-Chairman of the Fund, Henry S. Spalding, M.D.

We need to be reminded that the Fund is not a part of the KMA official structure, but at the same time is held in national regard as first among such programs in success. We find that we can continue to take pride in its accomplishments and warmly commend those KMA members who serve the Fund.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Physician-Attorney Liaison Committee

The purpose of the Physician-Attorney Liaison Committee is to establish, maintain, and perpetuate a greater degree of understanding and ethics between the respective professions. The basis upon which this Committee functions is the Interprofessional Code adopted both by the KMA House of Delegates and the Kentucky Bar Association, which stands as the basic document for mutual understanding and cooperation for the two groups.

The majority of our activities point to a need for increased communication and cooperation. This, of course, relates directly to the traditional association of physicians and attorneys in a legal setting. Just as patients are encouraged to discuss fees for medical procedures with physicians beforehand, we have seen that most misunderstandings that we have encountered have arisen from a parallel situation where a lack of communication, before any formal relation between physicians and attorneys has occurred, has resulted in the situations this Committee has been called upon to mediate.

Some basic examples of the situations the Committee has become involved in have been where an attorney felt that a physician's fee for a deposition was too high,

a question of the amount of a physician's fee for a court appearance, and a question where the responsibility lay for payment for the physician's legal testimony.

With regard to a physician's fee for giving a deposition, and for a court appearance, the Committee feels obliged to give note to the actual amount of preparation which must be undertaken by a physician. This preparation can consist of such items as referral to reference sources, consultation with peers or related medical specialists, and library documentation, in addition to careful review of pertinent individual patient records. Preparatory activities should be considered in contrast with the actual amount of time spent giving a deposition, for example, which might take only a few moments. These same considerations apply equally to court appearances.

With regard to fees paid to physicians for court appearances, it should be realized that such payment technically constitutes a courtesy, as opposed to required appearances in a strictly legal sense, which could be, again technically, obtained through simple subpoena.

To further emphasize the need for prior communications, the Committee encountered several examples where the responsibility for payment of a physician's fee in relation to legal testimony was not discussed beforehand. In most situations of this nature, the physician's medical knowledge and testimony is solicited by the attorney who, therefore, assumes a responsibility for fee reimbursement in a timely manner, not necessarily contingent on the outcome of any legal proceedings.

During this Associational year the Committee was gratified to be able to provide a forum for interchange between the respective professions in a nonjudicial and cooperative atmosphere. The foresight of these two professions in providing for this forum is to be commended. The Committee does, however, wish to reemphasize the fact that many, if not most, similar occurrences could be avoided by reference to the Interprofessional Code, which is available from both the KMA Headquarters and the Headquarters Office of the Kentucky Bar Association, before any formal relations between doctor and lawyer are begun.

Thomas M. Marshall, M.D., Co-Chairman

Recommendations, Reference Committee No. 6

Reference Committee No. 6 next reviewed the Report of the Physician-Attorney Liaison Committee and notes with some wry humor that doctors and lawyers share the same problems over fees.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the KMA-Kentucky Nurses Association Joint Practice Committee

At the time this report is being written, the KMA-KNA Joint Practice Committee has held one meeting this Associational year. Additional meetings are scheduled but deadlines for reporting to the House are such that this report is being written in advance.

Due to the extent of legislative activities of both Associations this year, it was impossible for the Joint Practice Committee to meet until the spring of the year. However, representatives from both KMA and KNA attended a meeting of the National Health Commission in Chicago last November. Information gained at that meeting was most informative and resulted in giving the Joint Practice Committee new direction for its activities. The message we received from the national meeting was that perhaps one area the Joint Practice Committees could involve themselves in would be to undertake an educational program to disseminate information on the joint practice concept and to try to explain some of the newer developments in joint practice in an effort to gain greater acceptance by both professions.

As a result, a planning subcommittee was formed to try to develop a program directed at physicians and nurses to discuss some of the more controversial areas of joint practice. We are hopeful this can be done in such a manner as to have representation of physicians and nurses from across the state and initial plans are to invite representatives from states having active and progressive joint practice committees to discuss what they are doing in their states with us. Recommendations regarding implementation of this program will be made to the Board of Trustees.

The Committee also discussed the possibility of having other professionals participate in our Committee discussions and for that reason feel that the current committee name of KMA-KNA Joint Practice Committee should be changed to simply The Joint Committee.

The feeling is shared by those on the Joint Practice Committee that a joint practice committee can certainly be an effective means of coordinating educational efforts between the two professions and as a sounding board for new ideas affecting the practice of medicine and nursing.

I am grateful to the physician members who faithfully attended our meeting this year and to Kenneth B. Crawford, M.D., who also attended the Joint Practice Commission meeting in Chicago. In addition, I am most appreciative to the Kentucky Nurses Association members for their cooperation in the committee structure.

Robert N. McLeod, Jr., M.D., Chairman

Recommendations, Reference Committee No. 6

Reference Committee No. 6 next reviewed the Report of the KMA-Kentucky Nurses Association Joint Practice Committee and listened to several remarks from those attending the Reference Committee. A student member of the Committee reported on increasing activity with other health professionals such as pharmacists, etc. Some misgivings surfaced in reading through paragraph 3 of the report about the expanding scope of their Association. The Committee further considered that expansion of this joint practice committee to involve other types of health personnel was contrary to current KMA thinking, and so paragraph 4 of page 24.1 and paragraph 1 of page 24.2 are rejected, as we see no reason to modify the KMA-Kentucky Nurses Association Joint Practice Committee to include any other professionals and, thereby, no change in the name of the Committee becomes necessary at this time.

Mr. Speaker, I move adoption of this section of the report.

(The motion was seconded and carried.)

Report of the Committee to Study the Constitution and Bylaws

Your Committee to Study the Constitution and Bylaws met this year on April 21 for its annual session to implement Bylaws changes that had been proposed to the Committee and to generally update the Bylaws.

Our format for presentations will be to first present our recommendations and reasons for submitting any proposed changes. Secondly, we will quote the wording of the present section of the Constitution and Bylaws and thirdly, present the proposed amendments to the Constitution and Bylaws.

Amendments to the Bylaws

Last year, in the final report of the KMA President, the recommendation was made that KMA ratify the concept of unified membership in county, state, and American Medical Association. The Reference Committee discussed that report, approved the concept of unified membership in principle, but recommended that the Constitution and Bylaws Committee draw up the appropriate language required for unified membership for consideration by the Delegates at the 1976 Annual Meeting. The current and proposed wording follow.

CHAPTER I, Membership

Present Section 1: Membership in this Association shall be coterminous with membership in a component county society. No physician shall be eligible for membership in this Association unless he is a member, in good standing of a component society, nor may he maintain membership in a component county society unless he is a member, in good standing of this Association.

When a physician who meets the qualifications hereinafter set forth, is certified to the Secretary-Treasurer as a member in good standing of a component society, properly classified as to type of membership, and when the dues pertaining to his membership classification have been received by the Secretary-Treasurer of the Association, the name of the member shall be included in the official roster of the Association and he shall be entitled to all the privileges of his class of membership. Provided, however, that members in good standing from other state societies may, if admitted to membership by a component society, be accepted by KMA for membership without paying dues for the remainder of the calendar year in which the transfer is made. Provided further, that the Board of Trustees shall have power, upon written application, approved annually by the county society of which the applicant is a member, to excuse any member from the payment of dues because of financial hardship. And provided further, that the Judicial Council, after a hearing, shall have power to condition membership in this Association upon the physician's agreement to limit the scope of his practice in any manner reasonably calculated to protect the public from the adverse effects of any demonstrated frailty or disability of said member.

Proposed Section 1: Membership in this Association shall be coterminous with membership in a component county society *and membership in the American Medical Association.* No physician shall be eligible for membership in this Association unless he is a member, in good standing of a component society *and in the American Medical Association,* nor may he maintain membership in a component county society *or the American Medical Association* unless he is a member, in good standing, of this Association.

(The rest of the section remains the same.)

Recommendation

Over the past year, there has been some confusion in the interpretation of Chapter I, Section 2, Paragraph (d), Associate Members. This paragraph states that medical officers of the Veterans Administration and other branches of the Federal Government are eligible for this category of membership. That is misinterpreted on occasion to mean physicians employed full time by the Veterans Administration. This category was established a few years ago to allow medical officers who might travel from state to state working in Veterans Administration Hospitals, to become a part of organized medicine. In order to clarify this section of the Bylaws, we are recommending that the phrase "but shall not be deemed to include physicians employed on a full-time basis by the Veterans Administration" be added.

CHAPTER I, Membership

Present Section 2(d) Associate Members: The associate membership of the Association shall consist of the associate members of the various component medical societies. To be eligible for associate membership in any component society, the applicant must qualify under one or more of the following groups:

1) Medical officers of the United States Army, Navy, Air Force, Veterans Administration, Public Health Service, or other federal governmental service while on duty in the State.

2) Osteopathic physicians who practice allopathic medicine.

Associate members shall not have the right to vote nor to hold office, but shall receive *The Journal* and other publications of the Association.

Proposed Section 2(d) Associate Members: The associate membership of the Association shall consist of the associate members of the various component medical societies. To be eligible for associate membership in any component society, the applicant must qualify under one or more of the following groups:

1) Medical officers of the United States Army, Navy, Air Force, Veterans Administration, Public Health Service, or other federal governmental service while on duty in the State, *but shall not be deemed to include physicians employed on a full-time basis by the Veterans Administration.*

Associate members shall not have the right to vote nor

to hold office, but shall receive *The Journal* and other publications of the Association.

Recommendation

The 1975 KMA House of Delegates passed Resolution F which would establish a new method of electing the Nominating Committee. The Constitution and Bylaws Committee was instructed to develop the Bylaws language for this change which we have done. However, in discussing this proposal, it seems to us to be a very cumbersome and complicated mechanism which will actually serve no useful purpose. For that reason, it is the opinion of your Committee that the House should reconsider its actions last year and leave the Bylaws as they are currently written with one exception.

That exception is to change the name of the Nominating Committee to the Nominating-Credentials Committee. The role of the Nominating Committee has changed over the past two or three years from a committee charged with the responsibility of nominating one individual for each vacant office to one of certifying that individuals whose names are submitted to them for office have attained the necessary qualifications for that office. For this reason, we are offering an alternate Chapter IV, Section 2.

CHAPTER IV. Election of Officers and Delegates to the American Medical Association

Present Section 2: During the last meeting of the regular session of the House of Delegates, the Speaker of the House of Delegates shall submit to the members of the House of Delegates a list of ten names from which, by ballot, the House of Delegates shall select five members to serve as the Nominating Committee for the next year. The five names receiving the most votes shall form the Committee, and the person receiving the most votes shall be Chairman. In the event that the Chairman so elected is unable or unwilling to serve, or in the event of a tie, the Committee shall elect one of its members as Chairman. The Committee shall meet at such time and place as determined by the Committee Chairman or the Board of Trustees, and shall schedule an open meeting immediately after the close of the first meeting of the House at each Annual Meeting. This open meeting shall be held in the meeting place of the House of Delegates, shall receive broad publicity, and those who have business to discuss with the committee shall have a hearing. The Nominating Committee shall verify the eligibility and willingness to serve of each candidate nominated. The Committee shall accept and post for information all eligible and willing candidates proposed for offices elected from the state at large. Before noon of the day following the opening meeting, the committee shall post on a bulletin board near the entrance to the hall in which the Annual Meeting is being held, its nomination, or nominations, for each office to be filled, and shall formally present said nomination, or nominations, to the House at the time of the election. Additional nominations may be made from the floor by submitting the nominations without discussion or comment. Vacancies occurring on the Nominating Committee by virtue of death, resignation, or disability, shall be filled by appointment of the Speaker.

Proposed Section 2 (Based on Resolution F): During the last meeting of the regular session of the House of Delegates, *the following procedure will be used to nominate and elect seven members to serve as the Nominating Committee for the next year.*

First: Two (2) of the members shall be elected from a list of six (6) names submitted by the Board of Trustees.

Second: The remaining five (5) members shall be elected from a list of fifteen (15) names, one name each being submitted from each of the fifteen Trustee Districts. This list of fifteen (15) names will be selected in the following manner: the delegates present at the Annual Meeting from each of fifteen (15) Trustee Districts shall caucus in the same manner as they do under Section 6. Just as they serve as a "mini-nominating committee" for nominating a Trustee and his alternate, they will serve as a "mini-nominating committee" for nominating a candidate for the final Nominating Committee itself.

Third: The two sets of nominees will appear on separate ballots and the final seven members of the Nominating Committee shall then be selected by the House of Delegates, at large.

Fourth: That member of the Nominating Committee receiving the largest percentage of vote shall be Chairman. In the event that the Chairman so elected is unable or unwilling to serve, or in the event of a tie, the Committee shall elect one of its members as Chairman. The Committee shall meet at such time and place as determined by the Committee Chairman or the Board of Trustees, and shall schedule an open meeting immediately after the close of the first meeting of the House at each Annual Meeting. This open meeting shall be held in the meeting place of the House of Delegates, shall receive broad publicity, and those who have business to discuss with the committee shall have a hearing. The Nominating Committee shall verify the eligibility and willingness to serve of each candidate nominated. The Committee shall accept and post for information all eligible and willing candidates proposed for offices elected from the state at large. Before noon of the day following the opening meeting, the committee shall post on a bulletin board near the entrance to the hall in which the Annual Meeting is being held, its nomination, or nominations, for each office to be filled, and shall formally present said nomination, or nominations, to the House at the time of the election. Additional nominations may be made from the floor by submitting the nominations without discussion or comment. Vacancies occurring on the Nominating Committee by virtue of death, resignation, or disability, shall be filled by appointment of the Speaker.

Committee's Alternate Proposed Section 2: During the last meeting of the regular session of the House of Delegates, the Speaker of the House of Delegates shall submit to the members of the House of Delegates a list of ten names from which, by ballot, the House of Delegates shall select five members to serve as the Nominating-*Credentials* Committee for the next year. The five names receiving the most votes shall form the Committee, and the person receiving the most votes shall be Chairman. In the event that the Chairman so elected is unable or unwilling to serve, or in the event

of a tie, the Committee shall elect one of its members as Chairman. The Committee shall meet at such time and place as determined by the Committee Chairman or the Board of Trustees, and shall schedule an open meeting immediately after the close of the first meeting of the House at each Annual Meeting. This open meeting shall be held in the meeting place of the House of Delegates, shall receive broad publicity, and those who have business to discuss with the committee shall have a hearing. The Nominating-*Credentials* Committee shall verify the eligibility and willingness to serve of each candidate nominated. The Committee shall accept and post for information all eligible and willing candidates proposed for offices elected from the state at large. Before noon of the day following the opening meeting, the committee shall post on a bulletin board near the entrance to the hall in which the Annual Meeting is being held, its nomination, or nominations, for each office to be filled, and shall formally present said nomination, or nominations, to the House at the time of the election. Additional nominations may be made from the floor by submitting the nominations without discussion or comment. Vacancies occurring on the Nominating-*Credentials* Committee by virtue of death, resignation, or disability, shall be filled by appointment of the Speaker.

It shall be the responsibility of the Nominating-Credentials Committee in the absence of qualified nominees for any position, to call such fact to the attention of the Board of Trustees and House of Delegates so that a nomination or nominations can be obtained.

Recommendation

President Hull proposed that the Executive Committee of KMA recommend that the title of the chief executive of KMA be changed to more appropriately reflect those of his peers. The Executive Committee agreed that the title Executive Vice President is used by most organizations to identify their chief staff person and felt the Bylaws should be changed accordingly. This can be done by replacing "Executive Director" with "Executive Vice President" when those words appear in Chapter V, Section 7, and again in Chapter VI, Section 9, of the Bylaws.

CHAPTER V, Duties of Officers Other Than Trustees and Alternates

Present Section 7: The Secretary-Treasurer shall advise the Executive Director in all administrative matters of this Association and shall act as the corporate secretary insofar as the execution of official documents or institution of official actions are required. He shall perform such duties as are placed upon him by the Constitution and Bylaws, and as may be prescribed by the Board of Trustees. The Secretary-Treasurer shall demand and receive all funds due the Association, including bequests and donations. He shall, if so directed by the House of Delegates, sell or lease any real estate belonging to the Association and execute the necessary papers and shall, subject to such direction, have the care and management of the fiscal affairs of the Association. All vouchers of the Association shall be signed by the Executive Director or his designee and shall be countersigned by the Secretary-Treasurer of the Association. When one or more of the above-named officials are not readily available, four specifically designated representatives of the Executive Commiteee are authorized to countersign the vouchers, provided that in any event all vouchers of the Association shall bear a signature and a countersignature. The four members of the Executive Committee authorized to countersign vouchers shall be designated by the Board during their reorganizational meeting in September and, whenever possible, should be easily accessible from the KMA Headquarters Office. All those authorized to countersign vouchers shall be required to give bond in an amount to be determined by the Board of Trustees. The Secretary-Treasurer shall report the operations of his office annually to the House of Delegates, via the Board of Trustees, and shall truly and accurately account for all funds belonging to the Association and coming into his hands during the year. His accounts shall be audited annually by a certified public accountant appointed by the Board of Trustees.

Proposed Section 7: The Secretary-Treasurer shall advise the Executive *Vice President* in all administrative matters of this Association and shall act as the corporate secretary insofar as the execution of official documents or institution of official actions are required. He shall perform such duties as are placed upon him by the Constitution and Bylaws, and as may be prescribed by the Board of Trustees. The Secretary-Treasurer shall demand and receive all funds due the Association, including bequests and donations. He shall, if so directed by the House of Delegates, sell or lease any real estate belonging to the Association and execute the necessary papers and shall, subject to such direction, have the care and management of the fiscal affairs of the Association. All vouchers of the Association shall be signed by the Executive *Vice President* or his designee and shall be countersigned by the Secretary-Treasurer of the Association.

(The rest of the section remains the same.)

CHAPTER VI, Board of Trustees

Present Section 9, Paragraph 1: The Board shall employ an Executive Director whose principal duty shall be to carry out and execute the policies established by the House of Delegates and the Board. His compensation shall be fixed by the Board. The Executive Director shall act as general administrative officer and business manager of the Association and shall perform all administrative duties necessary and proper to the general management of the Headquarters Office, except those duties which are specifically imposed by the Constitution and Bylaws upon the officers, committees, councils, and other representatives of the Association. He shall refer to the various elected officials all administrative questions which are properly within their jurisdiction.

Proposed Section 9, Paragraph 1: The Board shall employ an Executive *Vice President* whose principal duty shall be to carry out and execute the policies established by the House of Delegates and the Board. His compensation shall be fixed by the Board. The

Executive *Vice President* shall act as general administrative officer and business manager of the Association and shall perform all administrative duties necessary and proper to the general management of the Headquarters Office, except those duties which are specifically imposed by the Constitution and Bylaws upon the officers, committees, councils and other representatives of the Association. He shall refer to the various elected officials all administrative questions which are properly within their jurisdiction.

Robert L. McClendon, M.D., Chairman

Recommendations, Reference Committee No. 6

Reference Committee No. 6 next considered the Report of the Committee to Study the Constitution and Bylaws and spent the next 65 minutes on various difficult to "come to grips with" items contained in this Committee report. Therefore, each will be dealt with separately, as necessary.

Regarding Proposed Section 1, concerning coterminous membership in the American Medical Association, this Reference Committee heard almost unanimous opposition to this Section as well as so-called unified membership from persons attending the Reference Committee and from the Board of Trustees.

Mr. Speaker, Reference Committee No. 6 therefore disapproves of this Section of this Committee report and moves that it not be adopted.

(The motion was seconded but was defeated by a vote of 54 to 49.)

Proposed Section 2 (d) Associate Members, page 40.3 was approved.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Next considered was that portion of the Constitution and Bylaws Committee which dealt with a new method of electing the Nominating Committee. A very difficult to follow and understand report on this is contained on pages 40.4, 40.5, 40.6, and 40.7. Many persons felt free to give the Reference Committee the benefit of their excellent judgment on this matter and assured us that the solution was both near and clear. However, at the end of 90 minutes of open and closed session, Reference Committee No. 6 was unanimous in feeling that both the Proposed Section 2 (Based on Resolution F), as well as the Committee's Alternate Proposed Section 2, were both overly cumbersome, not at all clear, and have not accomplished the sense of the House as yet, and so we feel that this entire Section not be adopted at this time, and furthermore that it be returned once again to the Constitution and Bylaws Committee, or another appropriate committee for simplification and identification of purpose and clarity. Reference Committee No. 6 recommends that this section of the report not be accepted.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded. Eugene Sloan M.D., a member of the Board of Trustees, was recognized who made a motion that the above section not be referred back to the Constitution and Bylaws Committee, as called for by the Reference Committee, but rather that it be declared invalid; and further proposed that Resolution F passed by the 1975 House of Delegates be laid to rest and that the method of selecting the KMA Nominating Committee continue as it has in the past. The motion was seconded, and Doctor Sloan's amendment was adopted by the House.

Reference Commiteee No. 6 next considered a recommendation of the Executive Committee of KMA that is contained on pages 40.7, 40.8, 40.9 and 40.10, in which the title of the chief executive of KMA was to be changed to more appropriately reflect those of his peers, and whereby the "Executive Director" will become "Executive Vice President", and that these words be appropriately changed where they appear in Chapter V, Section 7, and again in Chapter VI, Section 9, of the Bylaws.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Report of the McDowell House Board of Managers

The McDowell House continues to be surveyed carefully by the entire Board of Managers at a meeting every three months of the year at the House. Attendance of the members has been unusually good, and the interest is very high.

The House continues in an attractive condition being well presented to the public by trained hostesses. Each year there is a slight increase in the number of the public who visit the House and who receive an inspiring lecture on the McDowell saga.

In the past year two points of interest have involved the Board. One was the renegotiation of insurance covering the House, its contents, etc., with a company located in Danville. It was felt that this was better for the contacts with the House.

The Kentucky Heritage Commission apparently is looking favorably on a 50-50 matching grant for repairs to the House. There are a number of matters that will need care in the near future, including removing the many coats of old paint and repainting, repair of windows, chimneys, fences, etc. This repair work will approximate $10,000, of which it is expected that the granting body will give $5,000.

The House continues to represent a focal point for the county and State medical auxiliaries whose efforts have been tremendously appreciated.

The planting of a small herb garden with many species known in the day of McDowell has proved another interesting small addition to the flora and fauna of the grounds of the House.

The Board recommends a visit by all members and families of the KMA to the House during the coming year. The situation appears to be quite satisfactory at this time.

Laman A. Gray, M.D., Chairman

Recommendations, Reference Committee No. 6

The next report considered was the McDowell House Board of Managers, and the Chairman of this Board, Laman A. Gray, M.D., was present. As before, this report to the Reference Committee continues to receive generous support from members of the audience, and especially those who have visited the McDowell House and we recommend it to your attention.

Mr. Speaker, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Resolution E

Campbell-Kenton Medical Society

WHEREAS, in order to provide the maximum "grass roots" input and direction into county medical societies, state medical associations, and the American Medical Association and so that policy, decisions on critical issues involving patients and physicians in this country, might be made on the "one man, one vote" principle, and

WHEREAS, it is necessary to provide the continuity of involvement of local physicians in the local, state, and national decision-making process, so that they will become better informed and involved, and will come to view the concept of "unified membership" as a necessary, desirable, and integral part of their participation in organized medicine, therefore be it

RESOLVED, that the House of Delegates of the Kentucky Medical Association agrees to accept for its state medical membership the concept of "unified membership" (i.e. a physician must be a member of the AMA in order to belong to the KMA and to his (her) county medical society) upon completion of the following conditions:

a) That the KMA will adopt, develop, and implement a statement referendum capability allowing each physician member of the KMA to vote on issues and/or proposals for action, brought to a referendum vote by a signed petition of 15% of the KMA physician membership or by a signed petition of 15% of the county medical societies of this state.

b) that the AMA will adopt and develop a nationwide referendum capability allowing each physician member of the AMA to vote on issues and/or proposals for action, brought to a nationwide referendum vote by a signed petition of 15% of the AMA physician membership, or by 15% of the state medical associations, or by 15% of the county medical societies of this nation, and, be it further

RESOLVED, that the KMA Board of Trustees take appropriate action to implement this on a state level, and be it further

RESOLVED, that the Kentucky Delegates to the AMA be directed to introduce an appropriate resolution to the AMA to implement this on a national level.

Recommendations, Reference Committee No. 6

The Committee next considered Resolution E—Unified Membership, introduced by the Campbell-Kenton County Medical Society, and its sponsor spoke indicating that the purpose of this resolution had already been served by not adopting Proposed Section 1 of the Constitution and Bylaws Committee on coterminous membership. Reference Committee No. 6 recommends that this resolution not be accepted.

Mr. Speaker, I move the adoption of this section of the report.

The motion was seconded. Hoyt D. Gardner, M.D., a KMA past president, was recognized who made a motion to delete the words, ". . . upon completion of the following conditions:" as well as the sections labeled "a" and "b," which appear in the first "Resolved" section of Resolution E, and to delete the remaining two "Resolved" sections entirely. Therefore, the "Resolved" section of Resolution E would read as follows:

> "RESOLVED, that the House of Delegates of the Kentucky Medical Association agrees to accept for its state medical membership the concept of 'unified membership' (i.e., a physician must be a member of the AMA in order to belong to the KMA and to his (her) county medical society)."

A standing vote was taken and the motion carried 63 to 61.

Resolution G

Campbell-Kenton Medical Society

WHEREAS, in order to provide for clear understanding of KMA policy on death and dying so that KMA members, patients, and members of the Kentucky Legislature and judicial community may be prepared to deal more effectively and ethically with this issue, be it

RESOLVED, that the KMA House of Delegates declares that legislative and judicial intrusion into circumstances surrounding the possible death of critically or terminally ill patients be kept at an absolute minimum, and be it further

RESOLVED, that decisions concerning the care of such patients should be left to the patient and his doctor and the patient's relatives in accordance with time honored customs, and be it further

RESOLVED, that the patient's wishes in these matters should be of utmost importance and should be respected whenever possible, and be it further

RESOLVED, that this policy of the KMA concerning death and dying is totally opposed to any form of "active euthanasia," and be it further

RESOLVED, that this policy of the KMA endorses the use of criteria for the definition of death as approved by the AMA and KMA to assist physicians in their determination of the time of death.

Recommendations, Reference Committee No. 6

Reference Committee No. 6 next considered Resolution G—Possible Death of Critically Ill Patients, introduced by Campbell-Kenton County Medical Society,

and agrees with the Board of Trustees in recommending that the wording of the last "resolve" read:

"RESOLVED, that this policy of the KMA endorses the use of criteria of the AMA's position on death to assist physicians in their determination of death."

Appended at the end of this resolution is an excerpt from AMA's adopted definition of death, which reads: "that death shall be determined by the clinical judgment of the physician using the necessary available and currently accepted criteria."

Mr. Chairman, I move the adoption of this section of the report.

(The motion was seconded and carried.)

Resolution K

Jefferson County Medical Society

WHEREAS, the KMA Board of Trustees is composed of fifteen (15) physicians, each nominated by those members in the counties contained in the districts they represent, and

WHEREAS, the allocation of KMA Trustees is determined by geographic area rather than physician population, and

WHEREAS, this means that many Trustees represent only a few physicians in their district while other Trustees with but a single vote represent several hundred physicians, and

WHEREAS, we realize that the KMA Board of Trustees has in previous years appointed a special committee to study the re-allocation of Trustee districts with no results. We still recommend that the House of Delegates instruct the Board to study and take action in this matter for the House of Delegates meeting in 1977, now therefore be it

RESOLVED, by the House of Delegates that the KMA Board of Trustees be instructed to bring a Bylaw Amendment back to the meeting in 1977 for re-apportionment of Trustees, and be it further

RESOLVED, that the re-apportionment of KMA Trustees be at least one (1) Trustee for each 200 physicians in each district.

Recommendations, Reference Committee No. 6

Reference Committee No. 6 next considered Resolution K—Re-Apportionment of KMA Board of Trustees, introduced by the Jefferson County Medical Society. A spirited hearing from many interested members of the audience was obtained.

There was considerable opposition to actually mandating a change which must be made by a specific time. It seemed to be the considered judgment of several other speakers that re-apportionment has had many hours and many years devoted to it by capable, wise members of the Association, and from diverse places about the State, and no truly satisfying scheme has been discovered. Furthermore, several "old hands" felt that this was not in the best interest of the entire Association membership.

Reference Committee No. 6 moves that Resolution K not be accepted.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

Resolution M

Jefferson County Medical Society

WHEREAS, a more democratic means of electing Officers of this Association by means of allowing each member in good standing of this Association to cast his individual vote is needed, therefore be it

RESOLVED, by the House of Delegates that the Kentucky Medical Association Board of Trustees be instructed to bring Constitutional (Article V, Section 4) and Bylaw (Chapter IV, Section 2) Amendments back to the Annual Meeting in 1977 to allow individual voting rights by a mail ballot to Association members in the election of Officers: President-Elect, Vice-President, and Secretary-Treasurer.

Recommendations, Reference Committee No. 6

Reference Committee No. 6 discussed at length Resolution M—KMA Election by Total Membership introduced by the Jefferson County Medical Society, with very strong speakers on both the pro and con sides of the issue.

After hearing full debate at the open Reference Committee hearing, the Committee as a whole agreed that adoption of this resolution would result in immediate profound changes in our procedures, and this, if for no other reason, needs longer study. It was likewise apparent during the hearing that too much opposition was voiced, together with many other obvious heavy burdens, including the very real possibility of being able to vote without appropriate information at hand on a candidate.

Reference Committee No. 6 recommends that this resolution not be accepted.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

Resolution N

Jefferson County Medical Society

BE IT RESOLVED, that the Board of Trustees and the Committee on Constitution and By-Laws be instructed to amend Article X-Referendum of the Constitution as indicated below.

Article X. Referendum

The membership of the Association, by written petition signed by not less than 10% of the active membership, may obtain a referendum on any question pending before, *or action taken by,* the House of Delegates. The Secretary, upon the presentation of such a petition to him, *no later than sixty (60) days following the date of said action taken,* shall cause the question to be submitted to the active membership by mail, and if the majority of the members shall signify its approval or disapproval of a certain policy or course of action with respect to the question *or action* thus submitted, the will of the majority shall determine the question *or action* and shall be binding upon the House of Delegates and the Association upon certification of the result of the vote by the Secretary to the President and Board of Trustees.

(New or additions to Article X italicized)

Recommendations, Reference Committee No. 6

The Committee next considered Resolution N—Amendment to Article S—Referendum, introduced by the Jefferson County Medical Society, and once again found itself in "knotty waters."

There was a great deal of sentiment actually in favor of this proposed change, which would make any action taken by the House of Delegates subject essentially to recall within sixty (60) days.

The majority of speakers present before the Reference Committee seemed to be in favor of passing this, and this was the sense that the Reference Committee members agreed upon. However, it became apparent, as the subject was opened up, that some very drastic things could happen and, therefore, some limitation should be placed on the subject matter to be voted on, some change in the percentage vote requirement, and, finally, that it be a sufficiently hard process to discourage unnecessary use.

Further concern about adopting this Resolution as presented refers to the fact that this House of Delegates is a very representative body of KMA and the change proposed puts in jeopardy the constitutional responsibility of this House of Delegates. This may, indeed, establish a policy of "the tail wagging the dog" by a distinct minority of KMA members, and is a step to be viewed with alarm. The lack of limitation on subject matter usurping the constitutional duties of this august body is a questionable step. It was concluded that this Resolution very much required further study and referral to the Constitution and Bylaws Committee for this purpose.

Mr. Speaker, Reference Committee No. 6 moves that this Resolution be referred to the Constitution and Bylaws Committee for further study.

Mr. Speaker, I move the adoption and implementation of this section of the report.

The motion was seconded. Much discussion arose from the floor regarding this section of the Reference Committee's report. Several motions and amendments to motions were made calling for non-acceptance of Resolution N or non-acceptance of the Reference Committee suggestion that Resolution N be referred to the Constitution and Bylaws Committee for further study. Motions were also heard to accept Resolution N.

Fred C. Rainey, M.D., from Hardin County, was recognized who made a motion that the entire matter be tabled indefinitely. The motion was seconded, and on a call for the vote, carried 63 to 35.

Resolution V

Pennyrile Medical Society

WHEREAS, it seems that many excellent men are no longer participating in the affairs of this Association who once participated very actively, and

WHEREAS, the American Medical Association has seen fit to broaden the scope of the American Medical Association House of Delegates without becoming unwieldy, and

WHEREAS, the KMA House of Delegates recognizes that wisdom and knowledge come with experience, and

WHEREAS, the KMA includes its last five past presidents as members of the House of Delegates, and

WHEREAS, the American Medical Association House of Delegates includes in ex-officio membership all general officers, past presidents, past vice presidents, and past trustees and the chairmen of standing committees who are not members of the House of Delegates, and

WHEREAS, the ex-officio members of the American Medical Association House of Delegates have the right to speak and debate on the floor of the House but do not have the right to introduce business or an amendment or make a motion or vote, now therefore be it

RESOLVED, that Article VI, Section 2 of the Constitution of the KMA be amended as follows:

Article VI, Section 2 which now reads:

"Delegates shall be members of and elected by component societies in such manner as may be provided in the bylaws. Officers of the Association, Delegates and Alternate Delegates of the American Medical Association and five immediate past presidents shall be ex-officio members of the House of Delegates and entitled to vote."

shall be changed to read as follows:

"Delegates shall be members of and elected by component societies in such manner as may be provided in the bylaws. Officers of the Association, Delegates and Alternate Delegates of the American Medical Association, and the five immediate living past presidents shall be members of the House and entitled to vote. All other past presidents and past chairmen of the Board of Trustees shall be ex-officio members of the House. They shall have the right to speak and debate on the floor of the House but shall not have the right to make a motion, introduce business or an amendment or vote."

and be it further

RESOLVED, the KMA House of Delegates encourages these leaders to actively continue to participate in the affairs of this Association.

Recommendations, Reference Committee No. 6

As the last item of business, Reference Committee No. 6 considered Resolution V, Composition of the House of Delegates of KMA Ex-Officio Members, introduced by Pennyrile Medical Society. This Committee recommends its adoption with one small addition consisting of inserting the word "and vice presidents" on line 13, page 2.

Mr. Speaker, I move the adoption and implementation of this section of the report.

(The motion was seconded and carried.)

Mr. Speaker, I move the adoption of the Report of Reference Committee No. 6 as a whole, as amended.

(The motion was seconded and carried.)

Mr. Speaker, I would like to thank my fellow members of Reference Committee No. 6, Doctors Cecil D. Martin, Wyatt Norvell, C. Ray Potts and L. Martin Wilson. Also, we thank those who gave testimony before our Committee, thus aiding in our deliberations, and those officers of our Association who counseled us. We

also are thankful for the good nature and skill of Mrs. Roessler, our able secretary and assistant.

REFERENCE COMMITTEE NO. 6

C. Nicholas Kavanaugh, M.D., Lexington, Chairman
Cecil D. Martin, M.D., Carrollton
Wyatt Norvell, M.D., New Castle
C. Ray Potts, M.D., Louisville
L. Martin Wilson, M.D., Bowling Green

Unfinished Business

Doctor Crowder recognized John P. Stewart, M.D., Chairman of the KMA Board of Trustees. Doctor Stewart moved, on behalf of the Board of Trustees, that the name of Samuel D. Weakley, M.D., Louisville, be placed in nomination for re-election to a full four-year term on the KMA Judicial Council. The motion was seconded from the floor and carried unanimously.

Election of Officers

Leslie W. Blakey, M.D., Chairman of the KMA Nominating Committee, then proceeded to the podium to give the report of the Nominating Committee. He read the following list of nominations for the positions noted:

President-Elect (Elected from the State at Large)	John P. Stewart, M.D. Frankfort
Vice-President (Elected from the State at Large)	John M. Baird, M.D. Danville
Vice-Speaker, House of Delegates (One Year of Three-Year Unexpired Term)	Bennett L. Crowder, II, M.D. Hopkinsville
AMA Delegate (1)	Harold D. Haller, M.D. Louisville
AMA Alternate Delegates (3)	Kenneth P. Crawford, M.D. Louisville (Full Two-Year Term) Wally O. Montgomery, M.D. Paducah (One Year of Two-Year Unexpired Term) Lee C. Hess, M.D. Florence (One Year of Two-Year Unexpired Term)

No additional nominations were received from the floor; therefore, it was moved and seconded that the nominees listed above be elected. Motion carried.

Doctor Stewart was then escorted to the podium and received a standing ovation.

Doctor Blakey then submitted the following nominations for the offices of Trustee and Alternate Trustee on behalf of the district nominating committees:

Second District	R. J. Phillips, M.D. Owensboro
Alternate	Albert H. Joslin, M.D. Owensboro
Seventh District	William H. Keller, M.D. Frankfort
Alternate	William Powers, M.D. Shelbyville
Ninth District	Don R. Stephens, M.D. Cynthiana
Alternate	Kelly G. Moss, M.D. Maysville
Tenth District	James B. Holloway, Jr., M.D. Lexington
Alternate	Richard F. Hench, M.D. Lexington
Thirteenth District	Howard B. McWhorter, M.D. Ashland
Alternate	George R. Bellamy, M.D. West Liberty

It was moved and seconded that the above slate of nominees be elected. Motion carried.

Election of 1977 Nominating Committee

The following physicians were elected by the House of Delegates to serve as the Nominating Committee for the 1977 Annual Meeting:

William N. Richardson, M.D., Cadiz, Chairman
Walter R. Brewer, M.D., Lexington
Danny M. Clark, M.D., Somerset
Elmer H. Jackson, M.D., Danville
Paul J. Sides, M.D., Lancaster

It was announced the Board of Trustees would hold its reorganizational meeting on Thursday at noon in the Jeffersonian Room of the Ramada Inn.

Doctor Cooper adjourned the second session of the 1976 House of Delegates at 1:20 a.m.

DYAZIDE®

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Each capsule contains 50 mg. of Dyrenium® (triamterene, SK&F Co.) and 25 mg. of hydrochlorothiazide.

MAKES SENSE FOR LONG-TERM CONTROL OF HYPERTENSION*



Before prescribing, see complete prescribing information in SK&F Co. literature or PDR. A brief summary follows:

* WARNING
This fixed combination drug is not indicated for initial therapy of edema or hypertension. Edema or hypertension requires therapy titrated to the individual patient. If the fixed combination represents the dosage so determined, its use may be more convenient in patient management. The treatment of hypertension and edema is not static, but must be reevaluated as conditions in each patient warrant.

* **Indications:** When the fixed combination represents the dosage determined by titration: Adjunctive therapy in edema associated with congestive heart failure, hepatic cirrhosis, the nephrotic syndrome. Corticosteroid and estrogen-induced edema, idiopathic edema; hypertension, when the potassium-sparing action of its 'Dyrenium' component is warranted.

Contraindications: Further use in progressive renal or hepatic dysfunction; hyperkalemia. Preexisting elevated serum potassium. Hypersensitivity to either component or other sulfonamide-derived drugs. Routine use of diuretics in otherwise healthy pregnancy.

Warnings: **Do not use potassium supplements, dietary or otherwise, unless hypokalemia develops or dietary intake of potassium is markedly impaired.** If supplementary potassium is needed, potassium tablets should not be used. Hyperkalemia can occur, and has been associated with cardiac irregularities. It is more likely in severely ill patients with urine volume less than one liter/day, the elderly or diabetics, with suspected or confirmed renal insufficiency. Periodic determinations of serum K^+ should be made. If hyperkalemia develops, substitute a thiazide alone, restrict K^+ intake. **The presence of a widened QRS complex or arrhythmia in association with hyperkalemia requires prompt additional therapy.** Thiazides are reported to cross the placental barrier and appear in breast milk; fetal or neonatal hyperbilirubinemia, thrombocytopenia, altered carbohydrate metabolism and other adverse reactions that have occurred in the adult may result. When used in pregnancy or in women who might bear children, weigh potential benefits against possible hazards to fetus. Adequate information on use in children is not available.

Precautions: Do periodic serum electrolyte determinations (particularly important in patients vomiting excessively or receiving parenteral fluids). Periodic BUN and serum creatinine determinations should be made, especially in the elderly, diabetics, or those with suspected or confirmed renal insufficiency. Watch for signs of impending coma in severe liver disease. If spironolactone is used concomitantly, determine serum K^+ frequently; both can cause K^+ retention and elevated serum K^+. Two deaths have been reported with such concomitant therapy (in one, recommended dosage was exceeded, in the other serum electrolytes were not properly monitored). Observe regularly for possible blood dyscrasias, liver damage, other idiosyncratic reactions. Blood dyscrasias have been reported in patients receiving Dyrenium® (triamterene, SK&F Co.), and leukopenia, thrombocytopenia, agranulocytosis, and aplastic anemia have been reported with thiazides. Do periodic blood studies in cirrhotics to check for nondrug-related variations in blood pictures, and in patients with folic acid depletion, since 'Dyrenium' may contribute to appearance of megaloblastosis. Antihypertensive effect may be enhanced in post-sympathectomy patients. Use cautiously in surgical patients. The following may occur: transient elevated BUN or creatinine or both, hyperglycemia and glycosuria (diabetic insulin requirements may be altered), hyperuricemia and gout, digitalis intoxication (in hypokalemia), decreasing alkali reserve with possible metabolic acidosis. 'Dyazide' interferes with fluorescent measurement of quinidine.

Adverse Reactions: Muscle cramps, weakness, dizziness, headache, dry mouth; anaphylaxis, rash, urticaria, photosensitivity, purpura, other dermatological conditions; nausea and vomiting, diarrhea, constipation, other gastrointestinal disturbances. Necrotizing vasculitis, paresthesias, icterus, pancreatitis, xanthopsia and, rarely, allergic pneumonitis have occurred with thiazides alone.

Supplied: Bottles of 100 and 1000 capsules; Single Unit Packages of 100 (intended for institutional use only).

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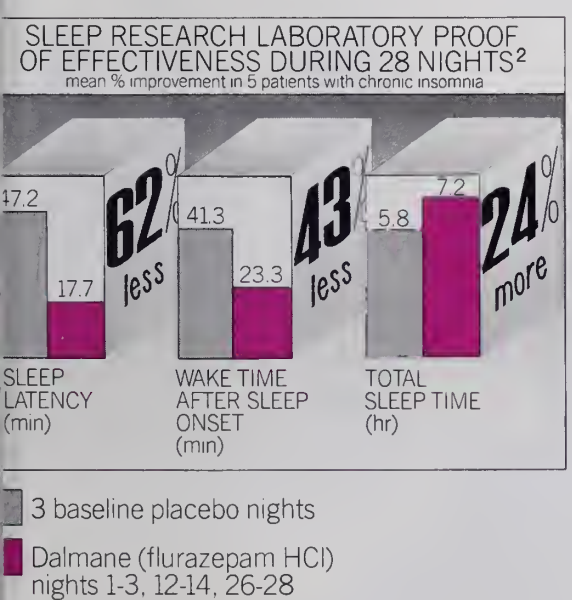

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For insomnia that is a chronic problem...

Only Dalmane (flurazepam HCl) offers sleep laboratory proof of effectiveness for as long as 28 nights

Continued relief of insomnia in patients with chronic insomnia

Since insomnia is often transient and intermittent, the prolonged administration of a hypnotic is generally not necessary or recommended. But when insomnia is a chronic or recurring problem, continued effectiveness is as important as initial effectiveness. Results of a recently published sleep research laboratory study[1] demonstrated that, while pentobarbital lost effectiveness within two weeks, Dalmane maintained effectiveness for 28 consecutive nights. Similar 28-night results with Dalmane, displayed below, were obtained by a second sleep research group.[2] In previous studies,[3] both chloral hydrate and glutethimide began to lose effectiveness after several nights, while Dalmane maintained effectiveness throughout the 14 medication nights. Whether the problem is difficulty falling asleep, staying asleep or sleeping long enough, consider these results when selecting a sleep medication.



Patient benefits include relative safety, infrequent morning "hang-over"

Dalmane is well tolerated, seldom causing morning drowsiness or grogginess.[4] No increase in dosage is required for continued effectiveness from night to night.[1-3] Should Dalmane be used repeatedly, periodic blood counts and liver and kidney function tests should be performed. The usual adult dose is 30 mg *h.s.*, but 15 mg may suffice for some patients and is recommended as a starting dose for the elderly and debilitated to help preclude oversedation, dizziness or ataxia.

Continued relief of insomnia: One more good reason to specify

Dalmane®
(flurazepam HCl)

One 30-mg capsule *h.s.*— usual adult dosage (15 mg may suffice in some patients).
One 15-mg capsule *h.s.*— initial dosage for elderly or debilitated patients.

whenever a hypnotic is needed

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Please see following page for a summary of product information.

Objective proof: continued insomnia relief without increasing dosage...[1,2]

Dalmane®
(flurazepam HCl) ℞ IV

Objectively proved in the sleep research laboratory...

during 28 consecutive nights of administration:

- ☐ **effectiveness with a single 30-mg *h.s.* dose, maintained**
- ☐ **rapid sleep induction, maintained**
- ☐ **sleep for 7 to 8 hours, on average, maintained**
- ☐ **less time awake during the night, maintained**

Before prescribing Dalmane (flurazepam HCl), please consult complete product information, a summary of which follows:

Indications: Effective in all types of insomnia characterized by difficulty in falling asleep, frequent nocturnal awakenings and/or early morning awakening; in patients with recurring insomnia or poor sleeping habits; in acute or chronic medical situations requiring restful sleep. Since insomnia is often transient and intermittent, prolonged administration is generally not necessary or recommended.

Contraindications: Known hypersensitivity to flurazepam HCl.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. Caution against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving).

***Usage in Pregnancy:* Several studies of minor tranquilizers (chlordiazepoxide, diazepam, and meprobamate) suggest increased risk of congenital malformations during the first trimester of pregnancy. Dalmane, a benzodiazepine, has not been studied adequately to determine whether it may be associated with such an increased risk. Because use of these drugs is rarely a matter of urgency, their use during this period should almost always be avoided. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.**

Not recommended for use in persons under 15 years of age. Though physical and psychological dependence have not been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage.

Precautions: In elderly and debilitated, limit initial dosage to 15 mg to preclude oversedation, dizziness and/or ataxia. Consider potential additive effects with other hypnotics or CNS depressants. Employ usual precautions in patients who are severely depressed, or with latent depression or suicidal tendencies. Periodic blood counts and liver and kidney function tests are advised during repeated therapy. Observe usual precautions in presence of impaired renal or hepatic function.

Adverse Reactions: Dizziness, drowsiness, lightheadedness, staggering, ataxia and falling have occurred, particularly in elderly or debilitated patients. Severe sedation, lethargy, disorientation and coma, probably indicative of drug intolerance or overdosage, have been reported. Also reported: headache, heartburn, upset stomach, nausea, vomiting, diarrhea, constipation, GI pain, nervousness, talkativeness, apprehension, irritability, weakness, palpitations, chest pains, body and joint pains and GU complaints. There have also been rare occurrences of leukopenia, granulocytopenia, sweating, flushes, difficulty in focusing, blurred vision, burning eyes, faintness, hypotension, shortness of breath, pruritus, skin rash, dry mouth, bitter taste, excessive salivation, anorexia, euphoria, depression, slurred speech, confusion, restlessness, hallucinations, paradoxical reactions, *e.g.*, excitement, stimulation and hyperactivity, and elevated SGOT, SGPT, total and direct bilirubins and alkaline phosphatase.

Dosage: Individualize for maximum beneficial effect. *Adults:* 30 mg usual dosage; 15 mg may suffice in some patients. *Elderly or debilitated patients:* 15 mg initially until response is determined.

Supplied: Capsules containing 15 mg or 30 mg flurazepam HCl.



REFERENCES:

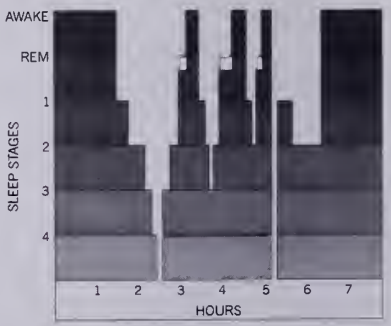
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4. Data on file, Medical Department, Hoffmann-La Roche Inc., Nutley NJ

For all common types of insomnia



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1976 CONSTITUTION AND BYLAWS OF THE KENTUCKY MEDICAL ASSOCIATION

Revised September 29, 1976

CONSTITUTION

Article I.	Name of the Association
Article II.	Purpose of the Association
Article III.	Component Societies
Article IV.	Composition and Meetings of the Association
Article V.	Officers
Article VI.	House of Delegates
Article VII.	Districts, Sections and District Societies
Article VIII.	Board of Trustees
Article IX.	Funds and Expenses
Article X.	Referendum
Article XI.	The Seal
Article XII.	Amendments
Article XIII.	Definitions

Article I. Name of Association

The name and title of this organization shall be the Kentucky Medical Association.

Article II. Purpose of the Association

The purpose of the Association shall be to federate and bring into compact organization the entire medical profession of the State of Kentucky and to unite with similar associations in other states to form the American Medical Association, with a view to the extension of medical knowledge; the advancement of medical science and charity; the evaluation of the standards of medical education; the enactment and enforcement of just medical laws; the promotion of friendly intercourse among physicians and the guarding and fostering of their material interests; the protection of the members thereof against unjust assaults upon their professional care, skill or integrity; and to the enlightenment and direction of public opinion in regard to the great problems of state medicine so that the profession shall become more capable and honorable within itself and more useful to the public in the prevention and cure of disease and in prolonging and adding comfort to life.

Article III. Component Societies

Component societies shall consist of those medical societies which hold charters from this Association.

Article IV. Composition and Meetings of the Association

The Association shall consist of the members of the component societies, but the House of Delegates shall have authority to adopt such bylaws regulating the admission and classification of members as it may deem advisable. The Association shall hold an Annual Meeting and such Special Meetings as may be called pursuant to the bylaws.

Articles V. Officers

Section 1. The officers of this Association shall be a President, a President-Elect, a Vice-President, a Secretary-Treasurer, a Speaker and Vice-Speaker of the House of Delegates, a Trustee and an Alternate Trustee from each district that may be established; and such other officers as may be provided for in the Bylaws.

Section 2. The eligibility, duties and terms of office of all officers of the Association shall be as prescribed in the Bylaws.

Section 3. All officers shall serve until their successors have been elected and installed.

Section 4. All officers shall be elected by the House of Delegates at its Regular Session and shall take office on the last day of the Annual Meeting.

Article VI. House of Delegates

Section 1. The House of Delegates shall be the legislative body of the Association and shall have power, by a two-thirds vote of all the delegates present at that session, to adopt bylaws to carry out the provisions of this Constitution and to provide for the government of the Association in any other manner not inconsistent with this Constitution. It shall meet in Regular Session annually during the Annual Meeting of the Association, and may be called into Special Session under such conditions as may be prescribed in the bylaws.

Section 2. Delegates shall be members of and elected by component societies in such manner as may be provided in the bylaws. Officers of the Association, Delegates and Alternate Delegates to the American Medical Association, and the five immediate Past Presidents shall be ex officio members of the House of Delegates and entitled to vote.

Section 3 The House of Delegates shall elect a Speaker and a Vice-Speaker, one of whom shall preside during the meetings of the House of Delegates. The presiding officer shall not be entitled to a vote except in the event of a tie.

Section 4. The House of Delegates shall be the final judge as to the qualification of its members.

Article VII. Districts, Sections and District Societies

The House of Delegates shall divide the state into Districts composed of one or more counties, for administrative purposes. It may also provide for a division of the scientific work of the Association into appropriate Sections, and for the organization of such District Societies, composed exclusively of members of component societies, as will promote the best interests of the profession.

Article VIII. Board of Trustees

The House of Delegates shall make provision in the bylaws for a Board of Trustees composed of one Trustee from each District and such of the other officers of the Association as the House may deem

appropriate, which shall be charged with the general direction of the Association's affairs during the interim between meetings of the House. The House may delegate such powers to the Board of Trustees as are not specifically required by this Constitution to be exercised by the House, and may limit the Board's powers to such extent as it may determine to be necessary or desirable, provided, however, that in no event shall the Board of Trustees have power to commit the Association to any course of action which is contrary to or at variance with any policy established by the House of Delegates.

Article IX. Funds and Expenses

The House of Delegates shall provide funds for meeting the expenses of the Association by such methods and from such sources as it may select. Funds may be appropriated by the House of Delegates to defray the expenses of the annual session, for publications, and for such other purposes as will promote the welfare of the Association and the profession.

Article X. Referendum

The membership of the Association, by written petition signed by not less than 10% of the active membership, may obtain a referendum on any question pending before the House of Delegates. The Secretary-Treasurer, upon the presentation of such a petition to him shall cause the question to be submitted to the active membership by mail, and if a majority of the active members shall signify its approval or disapproval of a certain policy or course of action with respect to the question thus submitted, the will of the majority shall determine the question and shall be binding upon the House of Delegates and the Association upon certification of the result of the vote by the Secretary-Treasurer to the President and Board of Trustees.

Article XI. The Seal

The Association shall have a common Seal with power to break, change or renew the same at pleasure.

Article XII. Amendments

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the delegates registered at the Regular Session, provided that such amendment shall have been presented in open meeting at the previous regular session, and that it shall have been sent officially to each component county society at least two months before the session at which final action is to be taken.

Article XIII. Definitions

Whenever used in this Constitution, the Articles of Incorporation or the Bylaws—

(a) "County society," "component county society," or "component medical society" means "component society."

(b) "Annual Meeting" means the annual three-day meeting of the Association.

(c) "Scientific Sessions" mean those sessions during the Annual Meeting at which scientific subjects are programmed and discussed.

(d) "Regular Session" means the regular session of the House of Delegates which is held during the Annual Meeting.

(e) "Special Session" means a special, called meeting or session of the House of Delegates.

BYLAWS

Chapter I. Membership
Chapter II. Annual and Special Meetings of the Association
Chapter III. The House of Delegates
Chapter IV. Election of Officers
Chapter V. Duties of Officers
Chapter VI. Board of Trustees
Chapter VII. Discipline—The Judicial Council
Chapter VIII. Standing Committees and Councils
Chapter IX. Assessments and Expenditures
Chapter X. Rules of Conduct
Chapter XI. Rules of Order
Chapter XII. County Societies
Chapter XIII. Amendments

CHAPTER I. MEMBERSHIP

Section 1. Membership in this Association shall be coterminous with membership in a component county society. No physician shall be eligible for membership in this Association unless he is a member, in good standing of a component society, nor may he maintain membership in a component county society unless he is a member, in good standing of this Association.

When a physician who meets the qualifications hereinafter set forth, is certified to the Secretary-Treasurer as a member in good standing of a component society, properly classified as to type of membership, and when the dues pertaining to his membership classification have been received by the Secretary-Treasurer of the Association, the name of the member shall be included in the official roster of the Association and he shall be entitled to all the privileges of his class of membership. Provided, however, that members in good standing from other state societies may, if admitted to membership by a component society, be accepted by KMA for membership without paying dues for the remainder of the calendar year in which the transfer is made. Provided further, that the Board of Trustees shall have power, upon written application, approved annually by the county society of which the applicant is a member, to excuse any member from the payment of dues because of financial hardship. And provided further, that the Judicial Council, after a hearing, shall have power to condition membership in this Association upon the physician's agreement to limit the scope of his practice in any manner reasonably calculated to protect the public from the adverse effects of any demonstrated frailty or disability of said member.

Section 2. Membership in the Association shall be divided into nine classes, to-wit: Active, Emeritus, In-Training, Associate, Inactive, Student, Service, Honorary and Special.

(a) Active Members. The active membership of the Association shall consist of the active members of the various component medical societies. To be eligible for active membership in any component society, the applicant must be a physician who holds an unrestricted or limited license to practice medicine and surgery in this state, and who is of good moral, ethical and professional standing. Nothing contained herein shall prevent a component society from requiring new members to occupy provisional status for a reasonable time after their admittance to membership under any classification.

(b) Emeritus Members. Component societies may elect as a member-emeritus any doctor of medicine or osteopathy who has served his profession with distinction and who has either reached the age of 70 or has retired from active practice. Emeritus members shall have the right to vote and be entitled to the benefits of Chapter VI, Section 8 of these Bylaws, but shall not pay dues. They shall receive *The Journal* and other publications of the Association.

(c) In-Training Members. Interns, residents, and teaching fellows who are doctors of medicine or osteopathy and who have complied with all pertinent regulations of the Kentucky State Board of Medical Licensure. In-training members shall have the right to vote and receive all publications of the Association, but shall not be counted in determining the number of delegates to which their county society is entitled in the House of Delegates.

(d) Associate Members. The associate membership of the Association shall consist of the associate members of the various component medical societies. To be eligible for associate membership in any component society, the applicant must qualify under one or more of the following groups:

(1) Medical officers of the United States Army, Navy, Air Force, Veterans Administration, Public Health Service, or other federal governmental service while on duty in the State, but shall be deemed to include physicians employed on a full-time basis by the Veterans Administration.

(2) Osteopathic physicians who practice allopathic medicine.

Associate members shall not have the right to vote nor to hold office, but shall receive *The Journal* and other publications of the Association.

(e) Inactive Members. The inactive membership of the Association shall consist of the inactive members of the various component county societies. Any doctor of medicine licensed to practice medicine in Kentucky who is not engaged in the practice of medicine but who is otherwise eligible for active membership in the Association may be admitted to inactive membership by any component county society. Inactive members shall not have the right to vote nor hold office, but shall receive *The Journal* and other publications of the Association.

(f) Student Members. Any student in an accredited medical school in Kentucky or any resident of Kentucky who is a student in any accredited medical school in the United States shall be eligible for student membership. They may apply directly to the State Association for membership and be assigned to the county society of their choice. The membership year for student members shall run from October 15 to October 14 of the next year. Student members may not hold office but may be voting members of any committee to which they are appointed. They will be represented in the House of Delegates through one voting representative, a student member of KMA elected by the student body at the University of Kentucky College of Medicine and one voting representative, a student member of the Kentucky Medical Association elected by the student body at the University of Louisville School of Medicine.

(g) Service Members. Members of the Association in good standing who enter military service and are ineligible for Associate membership shall be classified as service members. Service Members shall not be required to pay dues. If a member in good standing enters service prior to April 1 and has paid his dues for that year, he shall receive all publications and other benefits applicable to his class of membership in the Association and shall owe no further dues until January 1 following his release. If a member in good standing enters service prior to April 1 without paying his dues for that year, he shall receive publications and other benefits but shall owe the dues applicable to his class of membership immediately following his release from active duty. Members whose dues have not been received by April 1 are not in good standing.

(h) Honorary Members. Any physician possessed of scientific attainments who is a member of a constituent state medical association and who has participated in the program of the scientific session and who is not a citizen of Kentucky may by unanimous vote of the House of Delegates be elected to honorary membership. Honorary members shall be entitled to the privileges of the floor in all scientific sessions.

(i) Special Members. Component societies may invite dentists, pharmacists, funeral directors, or other professional persons to become special members. Special members shall have no rights or obligations under these Bylaws, but may be accorded the privilege of attending and participating in the scientific meetings of the society, provided, however, that a registration fee may be required of special members who desire to attend the Annual Meeting of the Association.

Section 3. Guests of Honor. Any distinguished physician not a resident of this State may become a guest of honor during any Annual Meeting upon invitation of the Board of Trustees and shall be accorded the privilege of participating in all of the scientific work of that meeting.

Section 4. No person who is finally convicted of a felony subsequent to September 26, 1968, shall be eligible for membership in this Association unless and until, upon proper application to the Judicial Council, it is determined that he is morally and ethically qualified. Except as provided in Chapter VII, Section 4 of these Bylaws, no person who is under sentence of suspension or expulsion from any component society of this Association shall be entitled to any of the rights or benefits of membership of this Association.

CHAPTER II. ANNUAL AND SPECIAL MEETINGS OF THE ASSOCIATION

Section 1. The Association shall hold its annual and special meetings at such times and places as may be determined by the House of Delegates.

Section 2. The Annual Meeting shall consist of one or more scientific sessions, at least two meetings of the House of Delegates, and such other gatherings as may be authorized by the Board of Trustees. Each scientific session shall be presided over by the President or in his absence or disability or at his request by the President-Elect or such officers as the Board of Trustees may direct. The entire time of the scientific sessions, as far as may be, shall be devoted to papers and discussions related to scientific medicine.

Section 3. The name of a physician upon the properly certified roster of members or list of delegates of a component society which has paid its annual assessment, shall be prima facie evidence of his right to register at any meeting of this Association.

Section 4. Each member in attendance at any meeting shall register indicating the component society of which he is a member. When his right to membership has been verified by reference to the roster of the society, he shall receive a badge which shall be evidence of his right to all privileges of membership at that meeting. No member or delegate shall take part in any of the proceedings of any meeting until he has complied with the provisions of this section.

CHAPTER III. THE HOUSE OF DELEGATES

Section 1. The House of Delegates shall meet in Regular Session at the time and place of the Annual Meeting, and shall, insofar as is practicable, fix its hours of meeting so as to give delegates an opportunity to attend the scientific sessions and other proceedings. Provided, however, that if the business interests of the Association and profession require, the Speaker, with the consent of the Board of Trustees, may convene the Regular Session in advance of the Annual Meeting, and the House may remain in session after the final adjournment thereof.

Section 2. The House may be called into Special Session by the President with the approval of the Board of Trustees, and a special session shall be called by the President on the written request of fifty duly elected delegates of the Association. The purpose of all special sessions shall be stated in the call, and all business transacted at any such special session shall be germane to the stated purpose.

Section 3 When a special session is called, the Secretary-Treasurer shall mail a notice of the time, place, and purpose of such meeting to the last known address of each delegate at least ten days before such session.

Section 4. The Speaker shall, by virtue of his office, be responsible for making all arrangements for all sessions, regular or special, of the House.

Section 5. The members of the House of Delegates shall be elected by the various component societies in the manner prescribed in Chapter XII of these Bylaws.

Section 6. In the event a component society is not represented at any meeting of the House, the Speaker shall consult with any officer of the component society who is in attendance and, with the approval of the Credentials Committee, may appoint any active member of such component society who is in attendance, as its alternate delegate. If no officer of such society is present, the Speaker may make the appointment without consultation, but with the approval of the Credentials Committee. All such appointments shall also be subject to the approval of the House.

Section 7. Forty per cent of the qualified delegates, as defined by Article VI of the Constitution, shall constitute a quorum and all of the meetings of the House shall be open to the members of the Association. The House shall have the right to go into executive session whenever in its judgment such action is indicated; except that active members of the Association shall have the right to attend all executive sessions.

Section 8. Each resolution introduced into the House shall be in writing and signed by the author and presented to the Secretary-Treasurer following its introduction. If the author presenting the resolution presents it as an individual member of the Kentucky Medical Association, the resolution shall be signed by him. If the author be a group of members or component society, the resolution shall be signed by the authorized spokesman for that group. Immediately after the delegate has introduced the Resolution, it shall be referred to the proper Reference Committee before action thereon is taken.

Section 9. No resolution shall be introduced in the first meeting of the House of Delegates by any member or group of members other than the Board of Trustees unless a copy thereof was furnished to the Headquarters Office at least seven days prior to its introduction. The only exception to this shall be that a resolution which has been signed by ten or more members of the House of Delegates and of which there are sufficient printed copies to distribute to each member of the House of Delegates may be received for consideration by an affirmative vote of three-fourths of the members present and voting. No new business shall be introduced in the last meeting of the House without unanimous consent, except when presented by the Board of Trustees. All new business so presented shall require the affirmative vote of three-fourths of those delegates present and voting, for adoption.

Section 10. The House shall give diligent attention to and foster the scientific work and spirit of the Association, and shall constantly study and strive to make each Annual Meeting a stepping stone to further ones of higher interest.

Section 11. It shall consider and advise as to the material interests of the profession, and of the public in those important matters wherein the public is dependent upon the profession, and shall use its influence to secure and enforce all proper medical and public health legislation, and to diffuse information in relation thereto.

Section 12. It shall make careful inquiry into the condition of the profession of each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse between physicians of the same locality and shall continue these efforts until every physician in every county of the State who will agree to abide by the constitution, bylaws and other rules and regulations of the Association and the appropriate component society, has been brought under medical society influence.

Section 13. It shall encourage postgraduate work in medical centers as well as home study and research and shall endeavor to have the results of the same utilized and intelligently discussed in the county societies.

Section 14. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and Bylaws of that body.

Section 15. It shall, upon application, provide and issue charters to county societies organized in conformity with the Constitution and Bylaws of this Association.

Section 16. The state shall be divided into the following districts:

No. 1—Ballard, Calloway, Carlisle, Fulton, Graves, Hickman, Livingston, McCracken, and Marshall.

No. 2—Daviess, Hancock, Henderson, McLean, Ohio, Union, and Webster.

No. 3—Caldwell, Christian, Crittenden, Hopkins, Lyon, Muhlenberg, Todd, and Trigg.

No. 4—Breckinridge, Bullitt, Grayson, Green, Hardin, Hart, Larue, Marion, Meade, Nelson, Taylor, and Washington.

No. 5—Jefferson.

No. 6—Adair, Allen, Barren, Butler, Cumberland, Edmonson, Logan, Metcalf, Monroe, Simpson, and Warren.

No. 7—Anderson, Carroll, Franklin, Gallatin, Grant, Henry, Oldham, Owen, Shelby, Spencer, and Trimble.

No. 8—Boone, Campbell, and Kenton.

No. 9—Bath, Bourbon, Bracken, Fleming, Harrison, Mason, Nicholas, Pendleton, Scott, and Robertson.

No. 10—Fayette, Jessamine, and Woodford.

No. 11—Clark, Estill, Jackson, Lee, Madison, Menifee, Montgomery, Owsley, Powell, and Wolfe.

No. 12—Boyle, Casey, Clinton, Garrard, Lincoln, McCreary, Mercer, Pulaski, Rockcastle, Russell, and Wayne.

No. 13—Boyd, Carter, Elliott, Greenup, Lawrence, Lewis, Morgan, and Rowan.

No. 14—Breathitt, Floyd, Johnson, Knott, Letcher, Magoffin, Martin, Perry, and Pike.

No. 15—Bell, Clay, Harlan, Knox, Laurel, Leslie, and Whitley.

District meetings may be held as desired, and District Medical Associations may be organized as desired, according to the districts outlined above.

Section 17. It shall have authority to appoint committees for special purposes from among members of the Association who are not members of the House of Delegates and such committees may report to the House of Delegates in person, and may participate in the debate thereon.

Section 18. It shall approve all memorials and resolutions issued in the name of the Association before the same shall become effective, except as provided in Chapter VI, Section 4, and except for the selection of the recipient of the Kentucky Medical Association Award (Outstanding Layman) and Distinguished Service Award (Outstanding Physician), which selections shall be made by the KMA Awards Committee.

Section 19. A digest of proceedings of the House of Delegates shall be published and distributed to the membership annually.

CHAPTER IV. ELECTION OF OFFICERS AND DELEGATES TO THE AMERICAN MEDICAL ASSOCIATION

Section 1. The President-Elect and the Vice President shall be elected from the state at large for a term of one year, the President-Elect succeeding to the presidency at the expiration of his term as President-Elect. A majority vote of those attending and voting shall be required for the election of the President-Elect and the Vice-President and on any ballot where a majority is not obtained, the candidate with the least votes shall be dropped and further balloting held until such time as one candidate receives a majority of the votes cast. Delegates to the AMA and their alternates shall be elected from the state at large for terms of two years, with the provision that no more than one delegate and no more than one alternate delegate shall be elected from one component society. The Speaker of the House of Delegates, the Vice-Speaker and the Secretary-Treasurer shall be elected for terms of three years, but no member shall be eligible for election to more than two consecutive full terms as Secretary-Treasurer. Trustees and their Alternates shall be elected for terms of three years and Trustees shall be limited to serving for not more than two consecutive full terms. The terms of the Trustees and their Alternates shall coincide and be so arranged that one-third of the terms expire each year, insofar as possible, provided, however, that nothing contained herein shall preclude an Alternate Trustee from serving two full terms as a Trustee. No member shall be eligible for the office of President, President-Elect, Vice-President, Secretary-Treasurer, Speaker or Vice-Speaker of the House of Delegates, Trustee or Alternate Trustee who has not been an active member of the Association for at least three years.

Section 2. During the last meeting of the regular session of the House of Delegates, the Speaker of the House of Delegates shall submit to the members of the House of Delegates a list of ten names from which, by ballot, the House of Delegates shall select five members to serve as the Nominating Committee for the next year. The five names receiving the most votes shall form the Committee, and the person receiving the most votes shall be Chairman. In the event that the Chairman so elected is unable or unwilling to serve, or in the event of a tie, the Committee shall elect one of its members as Chairman. The Committee shall meet at such time and place as determined by the Committee Chairman or the Board of Trustees, and shall schedule an open meeting immediately after the close of the first meeting of the House at each Annual Meeting. This open meeting shall be held in the meeting place of the House of Delegates, shall receive broad publicity, and those who have business to discuss with the committee shall have a hearing. The Nominating Committee shall verify the eligibility and willingness to serve of each candidate nominated. The Committee shall accept and post for information all eligible and willing candidates proposed for offices elected from the state at large. Before noon of the day following the opening meeting, the committee shall post on a bulletin board near the entrance to the hall in which the Annual Meeting is being held, its nomination, or nominations, for each office to be filled, and shall formally present said nomination, or nominations, to the House at the time of the election. Additional nominations may be made from the floor by submitting the nominations without discussion or comment. Vacancies occurring on the Nominating Committee by virtue of death, resignation, or disability, shall be filled by appointment of the Speaker.

Section 3. The election of officers and delegates to the AMA and their alternates shall be held at the second meeting of the regular session of the House of Delegates.

Section 4. All elections shall be by secret ballot, and a majority of the votes cast shall be necessary to elect, provided, however, that when there are more than two nominees, the nominee receiving the least number of votes on the first ballot shall be dropped and the balloting shall continue in like manner until an election occurs.

Section 5. Any member may make known his availability for any office within the gift of the Association. However, it would be regarded as unseemly for any member to actively campaign for his own election.

Section 6. The Delegates representing the counties in each District form the Nominating Committee for the purpose of nominating a Trustee and an Alternate Trustee for the District concerned. This committee shall hold a well publicized meeting open to all active members of the District concerned who are in attendance at the Annual Meeting for the purpose of discussing the nomination of the Trustee and his Alternate to serve the District. Additional nominations may be made from the floor when the Nomi-

nating Committee makes its report to the House of Delegates.

CHAPTER V. DUTIES OF OFFICERS OTHER THAN TRUSTEES AND ALTERNATES

Section 1. Except as provided in Chapter II, Section 2 hereof, the President shall preside at all scientific sessions of the Association and shall appoint all committees not otherwise provided for. He shall deliver an annual address at such time as may be arranged and shall perform such duties as custom and parliamentary usage may require. He shall be the real head of the profession in the State during his term of office and so far as practicable, shall visit or cause to be visited on his behalf, the various sections of the State and assist the Trustees in building up the county societies and in making their work more practical and useful. He shall be reimbursed for his reasonable and necessary travel expense incurred in the performance of his duties as President.

Section 2. The President-Elect shall assist the President in visitation of county and other meetings. He shall become president of the Association at the next Annual Meeting following his election as president-elect. In the event of his death or resignation, or if he becomes permanently disqualified or disabled, his successor shall be elected by the House of Delegates and shall be installed as President of the Association at its next regular session.

Section 3. The Vice President shall assist the President in the discharge of his duties, and shall perform such other duties as may be prescribed by the Board of Trustees. In the event of a vacancy in the office of the President, the Vice President shall succeed to the office of the President.

Section 4. The President-Elect and the Vice-President, when acting for and in behalf of the President, may be reimbursed for their reasonable and necessary travel expenses incurred in the performance of their duties in such amounts as may be available out of the sum appropriated in the annual budget for traveling expenses.

Section 5. The Speaker of the House shall preside at all meetings of the House of Delegates. He shall appoint all committees of the House of Delegates with the approval of the House of Delegates. He shall be a non-voting member of said committees, and shall perform such other duties as custom and parliamentary usage may require.

Section 6. The Vice Speaker shall assume the duties of the Speaker in his absence and shall assist the Speaker in the performance of his duties. In the event of the death, disability, resignation, or removal of the Speaker, the Vice Speaker shall automatically become Speaker of the House of Delegates.

Section 7. The Secretary-Treasurer shall advise the Executive Vice President in all administrative matters of this Association and shall act as the corporate secretary insofar as the execution of official documents or institution of official actions are required. He shall perform such duties as are placed upon him by the Constitution and Bylaws, and as may be prescribed by the Board of Trustees. The Secretary-Treasurer shall demand and receive all funds due the Association, including bequests and donations. He shall, if so directed by the House of Delegates, sell or lease any real estate belonging to the Association and execute the necessary papers and shall, subject to such direction, have the care and management of the fiscal affairs of the Association. All vouchers of the Association shall be signed by the Executive Vice President or his designee and shall be countersigned by the Secretary-Treasurer of the Association. When one or more of the above-named officials are not readily available, four specifically designated representatives of the Executive Committee are authorized to countersign the vouchers, provided that in any event all vouchers of the Association shall bear a signature and a countersignature. The four members of the Executive Committee authorized to countersign vouchers shall be designated by the Board during their reorganizational meeting in September and, whenever possible should be easily accessible from the KMA Headquarters Office. All those authorized to countersign vouchers shall be required to give bond in an amount to be determined by the Board of Trustees. The Secretary-Treasurer shall report the operations of his office annually to the House of Delegates, via the Board of Trustees, and shall truly and accurately account for all funds belonging to the Association and coming into his hands during the year. His accounts shall be audited annually by a certified public accountant appointed by the Board of Trustees.

CHAPTER VI. BOARD OF TRUSTEES

Section 1. The Board of Trustees shall be the executive body of the House of Delegates and between sessions of the House of Delegates shall exercise the powers conferred upon the House of Delegates by the Constitution and Bylaws. The Board of Trustees shall consist of the duly elected Trustees and the President, the President-Elect, the Vice-President, the immediate Past-President, the Speaker, and Vice-Speaker of the House of Delegates, the Secretary-Treasurer, and the Delegates to the American Medical Association. The Executive Committee of the Board of Trustees shall consist of the President, the Vice-President, the President-Elect, the Secretary-Treasurer, the Chairman of the Board of Trustees, the Vice Chairman of the Board of Trustees, and two trustees to be elected annually by the Board of Trustees. A majority of the full Board, to-wit, 14, and a majority of the full Executive Committee, to-wit, 5, shall constitute a quorum for the transaction of all business by either body. Between sessions of the Board, the Executive Committee shall exercise all of the powers belonging to the Board except those powers specifically reserved by the Board to itself.

Section 2. The Board shall meet daily, or as required, during the Annual Meeting of the Association and at such other times as necessity may require, subject to the call of the Chairman or on petition of three Trustees. It shall meet on the last day of the Annual Meeting for reorganization and for the outlining of the work for the ensuing year. It shall, through its Chairman, make an annual report to the House of Delegates at such time as may be provided, which report shall include an audit of the accounts of the Secretary-Treasurer and other agents of this Association and which shall also specify the character and cost of all the publications of the Association during the year, and the amounts of all other property belonging to the Association, or under its control, with such suggestions as it may deem necessary. By accepting or rejecting this report, the House may approve or disapprove the action of the Board of Trustees in whole or in part, with respect to any matter reported upon therein. In the event of a vacancy in any office other than that of President, the Board may fill the same until the annual election.

Section 3. Each Trustee shall be organizer, peacemaker and censor for his district. He shall hold at least one district meeting each year for the exchange of views on problems relating to organized medicine and for postgraduate scientific study. The necessary traveling expenses incurred by a Trustee in the line of his duties herein imposed may be paid by the Secretary-Treasurer upon a proper itemized statement

but this shall not be constituted to include his expenses in attending the Annual Meeting of the Association.

Section 4. The Board shall have the authority to communicate the views of the profession and of the Association in regard to health, sanitation, and other important matters, to the public and press.

Section 5. The Journal of the Kentucky Medical Association shall be the official organ of the Association and shall be published under the supervision of the Board. The Editor of the Journal shall be elected by the Board. All money received by the Journal or by any member of its staff on its behalf, shall be paid to the Secretary-Treasurer on the first of each month. The Board shall provide for and superintend the publication and distribution of all proceedings, transactions, and memoirs of the Association, and shall have authority to appoint such assistants to the Editor as it deems necessary.

Section 6. All commercial exhibits during the Annual Meeting shall be within the control and direction of the Board.

Section 7. In the event of the death, resignation, removal or disability of a Trustee, between sessions of the House of Delegates, the Alternate Trustee shall succeed to the office of Trustee. In case of disability, the Alternate shall serve until the disability is removed or the Trustee's term expires, and in the absence of the Trustee, the Alternate Trustee shall vote in his place and stead.

Section 8. The Association, upon the request of any member in good standing who is a defendant in a professional liability suit, will provide such member with the consultative service of competent legal counsel selected by the Secretary-Treasurer acting under the general direction of the Executive Committee. In addition, the Association may, upon application to the Board outlining unusual circumstances justifying such action, provide such member with the services of an attorney selected by the Board to defend such suit through one court.

Section 9. The Board shall employ an Executive Vice President whose principal duty shall be to carry out and execute the policies established by the House of Delegates and the Board. His compensation shall be fixed by the Board. The Executive Vice President shall act as general administrative officer and business manager of the Association and shall perform all administrative duties necessary and proper to the general management of the Headquarters Office, except those duties which are specifically imposed by the Constitution and Bylaws upon the officers, committees, councils and other representatives of the Association. He shall refer to the various elected officials all administrative questions which are properly within their jurisdiction.

He shall attend the Annual Meeting, the meetings of the House of Delegates, the meetings of the Board, as many of the committee and council meetings as possible, and shall keep separately the records of their respective proceedings. He shall, at all times, hold himself in readiness to advise and aid, so far as is possible and practicable, all officers, committees, and councils of the Association in the performance of their duties and in the furtherance of the purposes of the Association. He shall be allowed traveling expenses to the extent approved by the Board.

He shall be the custodian of the general papers and records of the Association (including those of the Secretary-Treasurer) and shall conduct the official correspondence of the Association. He shall notify all members of meetings, officers of their election, and committees and councils of their appointment and duties.

He shall account for and promptly turn over to the Secretary-Treasurer all funds of the Association which come into his hands. It shall be his duty to receive all bills against the Association, to investigate their fairness and correctness, to prepare vouchers covering the same, and to forward them to the Secretary-Treasurer for appropriate action. He shall keep an account with the component societies of the amounts of their assessments, collect the same, and promptly turn over the proceeds to the Secretary-Treasurer. He shall, within thirty days preceding each Annual Meeting, submit his financial books and records to a certified public accountant, approved by the Board, whose report shall be submitted to the House of Delegates.

He shall keep a record of all physicians in the State by counties, noting on each his status in relation to his county society, and upon request shall transmit a copy of this list to the American Medical Association.

He shall act as Managing Editor, or otherwise supervise the publication of *The Journal of the Kentucky Medical Association* and such other publications as may be authorized by the House of Delegates, under the guidance and direction of the Board.

He shall perform such additional duties as may be required by the House of Delegates, the Board, or the President, and shall employ such assistants as the Board may direct. He shall serve at the pleasure of the Board, and in the event of his death, resignation, or removal, the Board shall have the power to fill the vacancy. From time to time, or as directed by the Board, he shall make written reports to the Board and House of Delegates concerning his activities and those of the Headquarters Office.

CHAPTER VII. DISCIPLINE — THE JUDICIAL COUNCIL

Section 1. There is hereby created a Judicial Council composed of the Secretary-Treasurer of the Association and four members to be elected by the House of Delegates for terms of four years each. One member shall be elected from each of the traditional eastern, western, and central districts, and one member from the state at large. Members of the first Judicial Council shall be elected for terms of one, two, three, and four years, respectively so that thereafter, one member will be elected each year. The Council shall annually elect a chairman.

To be eligible for membership on the Judicial Council, a nominee shall possess at least one of the following qualifications: (1) Have served one term as an officer, trustee, or a Delegate to the AMA or (2) Have served five years as a member of the House of Delegates.

It shall be the duty of the Board of Trustees to nominate at least one candidate for each vacancy on the Judicial Council, but additional nominations may be made from the floor. Vacancies which occur between Regular Sessions of the House of Delegates, shall be filled by the Board of Trustees. No member, other than the Secretary-Treasurer shall serve more than two consecutive terms.

Section 2. The Judicial Council shall be the Board of Censors of the Association. It shall be the final arbiter of all questions involving the right and standing of members, whether in relation to other members, to the component societies, or to this Association. All charges of breach of medical ethics brought before the House of Delegates shall be referred to the Judicial Council without discussion. A member who has been convicted of a felony or of any violation of the Medical Practice Act, or who violates any of the provisions of the constitution, bylaws, or any rule or regulation of this Association, or the Principles of

Ethics of the American Medical Association shall be liable to censure, fine, suspension, or expulsion upon order of the Judicial Council. Provided, however, that if in addition to discipline by the Association, the Judicial Council shall be of the opinion that the offending member's license to practice medicine should be revoked, it shall report this to the Board of Trustees as a recommendation that the Board refer the matter to the State Board of Licensure for this purpose.

Suspension shall be for a specified period during which the member shall remain liable for the payment of dues but shall not be eligible to hold office, attend business meetings or otherwise participate in Associational activities at the county, district or state levels. Upon the expiration of the period of suspension, every suspended member shall be automatically restored to all of the rights and privileges of his class of membership unless the Judicial Council determines that his conduct during the period of suspension indicates that he is unworthy of such restoration, in which event his suspension may be extended or he may be expelled.

Upon the complaint of any member or aggrieved individual involved, the Judicial Council may initiate disciplinary proceedings against any member, and may intervene in or supersede county, individual trustee, or district disciplinary proceedings, whenever in its sole judgment and opinion, a disciplinary matter is not being handled in an expeditious manner, and may render a decision therein. In all cases in which the Association, rather than a member or aggrieved individual, appears to be the real party in interest, the Judicial Council may refer the complaint to the Board of Trustees for a determination as to whether probable cause for disciplinary action exists. If the Board of Trustees resolves this question in the affirmative, it shall so charge the respondent, and a representative of the Board shall thereupon be responsible for presenting the evidence in support of such charge at any hearing held thereon.

In all proceedings of the Judicial Council, the due process requirements of reasonable notice and a full and fair hearing shall be observed. No recommended disciplinary decision of an individual trustee or any district grievance committee shall become effective unless and until approved by the Judicial Council.

Section 3. It shall consider all appeals from the recommended decisions of individual trustees and District Grievance Committees. In the case of appeals from the decisions of individual trustees, the Judicial Council may admit such oral or written evidence as in its judgment will best and most fairly present the facts, but all appeals from the recommended decisions of District Grievance Committees shall be considered on the record made before such committee. It shall be the duty of the Secretary to notify the parties with respect to its disposition of each case.

Section 4. The Judicial Council may hear appeals from the disciplinary orders of component societies. Provided, however, that such appeals shall be considered on the record made before the component societies.

Section 5. Efforts toward conciliation and compromise shall precede the hearing of all disciplinary cases, but the decision of the Judicial Council shall be final. A party aggrieved by the decision of the Judicial Council may seek an appeal to the Judicial Council of the American Medical Association in accordance with the jurisdiction, rules and regulations of that Association.

Section 6. Component societies are encouraged to create suitable disciplinary procedures which guarantee due process, and to dispose of all disciplinary problems which come to their attention. It is recognized, however, that it may not be feasible for some societies to do so, and the District Grievance Committees hereinafter created, are designed to meet the needs of county societies which are without a functioning grievance committee.

Section 7. The trustee of each district is hereby designated the chairman of his District Grievance Committee. The Judicial Council shall designate two additional trustees from districts adjoining that of the chairman, and the three trustees thus selected shall constitute the District Grievance Committee. All grievances which cannot be resolved by individual trustees, shall be referred to the local grievance committee or the district grievance committee for the district in which the respondent physician or county society resides.

Section 8. District Grievance Committees shall investigate every grievance coming to their attention, taking care that the physician complained of shall have ample opportunity to respond to the complaint. If, after careful investigation, the complaint appears to be without merit, the committee shall so report to the Judicial Council, including sufficient facts in its report to enable Judicial Council to form its own conclusions.

If the District Grievance Committee's investigation indicates that the member may be a proper subject of disciplinary action, the committee shall, upon reasonable notice, hold a hearing at which the complainant and the respondent shall be entitled to be represented by counsel, to present the testimony of witnesses in his behalf, and to cross-examine witnesses against him. All testimony shall be under oath and shall be recorded by a competent reporter at the expense of the Association, but shall not be transcribed unless and until an appeal is taken as hereinafter provided.

When all of the testimony has been heard and all evidence received, the committee shall make written findings and recommendations which it shall transmit to the Judicial Council, furnishing copies thereof to the parties.

Section 9. Any party aggrieved by the findings or recommendations of the committee, may, within 30 days, appeal to the Judicial Council. Appeals shall be taken by filing with the Secretary-Treasurer a copy of the entire record made before the District Grievance Committee (including a transcript of the testimony, procured at the appellant's expense) together with a written statement of appeal pointing out in detail wherein the committee has erred, and directing the attention of the Judicial Council to those portions of the transcript upon which he relies, provided, however, that the Judicial Council may extend the time in which the transcript must be filed, upon request made within the initial thirty-day period.

Section 10. No report or opinion of the Judicial Council shall be considered the policy of the Association until approved by the House of Delegates. Any report or opinion of the Judicial Council submitted to the House of Delegates may be accepted or rejected or referred back to the Judicial Council but not modified by the House of Delegates.

CHAPTER VIII. COMMITTEES AND COMMISSIONS

Section 1. The Board of Trustees shall have authority from time to time to appoint, fix the duties of, and abolish such standing committees and commissions as it deems necessary or desirable to assist it in carrying on the Association's activities in the fields of business and scientific meetings, medical education and hospitals, legislation, medical services, communications

and public service, and governmental medical services.

Section 2. The Executive Committee shall serve as the nominating committee for all standing committee and commission appointments, but the trustees may make additional nominations. When the Executive Committee sits as such nominating committee, the President-Elect shall serve as Chairman.

Section 3. The President, with the advice and consent of the Chairman of the Board of Trustees, may appoint temporary, ad hoc committees to perform specified functions. All such committees shall expire at the end of the term of the President by whom appointed.

Section 4. No committee or commission shall have power or authority to fix or determine Associational policy or to commit the Association to any course of action, such powers being expressly reserved to the House of Delegates and the Board of Trustees.

CHAPTER IX. ASSESSMENTS AND EXPENDITURES

Section 1. The annual dues for membership in this Association shall be as follows: (1) Active Members, $225; (2) Emeritus Members, no dues; (3) Associate Members, $25; (4) In-Training Members, $20; (5) Inactive Members, $25; (6) Student Members, $10; (7) Service Members, no dues; (8) Special Members, no dues. The dues during the first year for any active member shall be pro-rated on the basis of the date of his application. Dues fixed by these Bylaws shall constitute assessments against the component societies. Unless otherwise instructed by the Board of Trustees (which may institute centralized billing) the Secretary of each component society shall forward its assessments together with its properly classified roster of all officers and members, list of delegates, and list of non-affiliated physicians of the county to the Secretary-Treasurer of this Association as of the first day of January each year.

Section 2. Unless otherwise provided by the Board of Trustees pursuant to Section 1 hereof, any component society which fails to pay its assessments, or make the report as required, on or before the first day of April in each year, shall be held as suspended and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Association or of the House of Delegates until such requirements have been met.

Section 3. All motions and resolutions appropriating money shall specify a definite amount or so much thereof as may be necessary for the purpose, and must have prior approval of the Board of Trustees before they can become effective. No motion or resolution, the adoption of which would require a substantial expenditure of funds, shall be considered by the House of Delegates unless the funds have been budgeted or are provided by the motion or resolution.

CHAPTER X. RULES OF CONDUCT

The principles set forth in the Principles of Ethics of the American Medical Association, together with the Constitution and Bylaws of the Association and all duly adopted resolutions of the House of Delegates, shall govern the conduct of members in their relation to each other and to the public.

CHAPTER XI. RULES OF ORDER

The deliberations of this Association shall be governed by parliamentary usage as contained in the latest edition of Sturgis' Standard Code of Parliamentary Procedure, unless otherwise determined by a vote of its respective bodies.

CHAPTER XII. COUNTY SOCIETIES

Section 1. Except as provided in Section 3 of this Chapter, all county medical societies in this State which have adopted principles of organization not in conflict with this Constitution and Bylaws shall, upon application to the House of Delegates, receive a charter from and become a component part of this Association.

The House of Delegates shall have authority to evoke the charter of any component society whose actions are in conflict with the letter or spirit of this Constitution and Bylaws.

Section 2. As rapidly as can be done after the adoption of this Constitution and Bylaws, a medical society shall be organized in every county in the state in which no component society exists, and charters shall be issued thereto.

Section 3. Only one component society shall be chartered in any county. Membership in the component society thus created shall entitle the members thereof to all the rights and benefits of membership in the Kentucky Medical Association.

Section 4. In sparsely settled sections two or more component societies may join for scientific programs, the election of officers, and such other matters as they may deem advisable. The component societies thus combined shall not lose any of their privileges or representation. The active members of each component society shall annually elect at least a Secretary and a Delegate for the transaction of its business with the Association.

Two or more adjacent component societies may also combine into one multi-county component society by adopting resolutions to that effect at special meetings called for that purpose on at least ten days' notice. Copies of the resolution, certified as to their adoption by the Secretary of each society, shall be forwarded to the Headquarters Office. If approved by the Board of Trustees, the multi-county society shall thereupon be issued a charter, the consolidating county societies shall cease to exist and the multi-county society shall become a component society of this Association; provided, however, that the active members residing in each county comprising the multi-county society shall be entitled to elect a delegate or delegates to the House of Delegates, as if each such county constituted a component society within the meaning of Section 11 of this Chapter; and provided, further, that multi-county societies may elect, at large, one alternate delegate for each delegate to which it is entitled under this section and such alternate may serve in the absence of the delegate for whom he is the designated alternate.

Section 5. Each component society shall be the sole judge of the qualifications of its own members. All members of component societies shall be members of the Kentucky Medical Association and shall be classified in accordance with Chapter I, Section 2 of these Bylaws, provided, however, that no physician who is under suspension or who has been expelled shall thereafter, without reinstatement by the Board of Trustees be eligible for membership in any component society. Any physician who desires to become a member of the Kentucky Medical Association shall first apply to the component society in the county in which he resides, for membership therein. Except as hereinafter provided in Sections 6 and/or 8 of this chapter, no physician shall be an active member of a component society in any county other than the county in which he resides.

Section 6. Any physician who may feel aggrieved by the action of the component society of the county in which he resides, in refusing him membership, shall have the right to appeal to the Board of Trustees, which, upon a majority vote, may permit him to apply for membership in a component society in a county which is adjacent to the county in which he resides.

Section 7. When a member in good standing in a component society moves to another county in the State, his name, upon request, shall be transferred without cost to the roster of the component society into whose jurisdiction he moves, if he is admitted to membership therein.

Section 8. A physician whose residence is closer to the headquarters of an adjacent component society than it is to the headquarters of the component society of the county in which he resides, may, with the consent of the component society within whose jurisdiction he resides, hold membership in said adjacent component society.

Section 9. Each component society shall have general direction of the affairs of the profession in the county, and its influence shall be constantly exerted for bettering the scientific, moral and material conditions of every physician in the county. Systematic efforts shall be made by each member, and by the society as a whole, to increase the membership until it embraces every qualified physician in the county.

Upon reasonable notice and after a hearing, component societies may discipline their members by censure, fine, suspension or expulsion, for any breach of the Principles of Medical Ethics or any bylaw, rule or regulation lawfully adopted by such societies or this Association. At every hearing, the accused shall be entitled to be represented by counsel and to cross-examine witnesses, and the society shall cause a stenographic record to be made of the entire proceedings. The stenographer's notes need not be transcribed unless and until requested by the respondent member.

Any physician aggrieved by the disciplinary action of a component society may, within ninety (90) days, appeal to the Judicial Council, whose decision shall be final. This appeal shall be in writing and shall point out in detail the errors committed by the county society. It shall be accompanied by a transcript of the proceedings before the county society, procured at appellant's expense, and the statement of appeal shall direct the attention of the Judicial Council to those portions of the transcript upon which he relies.

Any member who fails or refuses to comply with the lawful disciplinary orders of his component society shall, if such failure or refusal continues for more than thirty (30) days, be automatically suspended from membership, provided, however, that an appeal shall stay the suspension until a final decision is made by the Judicial Council.

The resignation of a member against whom disciplinary charges are pending or who is in default of the disciplinary judgment of his county society, a district grievance committee or the Board of Trustees shall not be accepted and no member who is suspended or expelled may be reinstated or readmitted unless and until he complies with all lawful orders of his component society and the Board of Trustees.

Section 10. Frequent meetings shall be encouraged and the most attractive programs arranged that are possible. Members shall be especially encouraged to do postgraduate and original research work, and to give the society the first benefit of such labors. Official positions and other references shall be unstintingly given to such members.

Section 11. At the time of the annual election of officers, each component society shall elect a delegate or delegates to represent it in the House of Delegates. The term of a delegate shall commence on the first day of the regular session of the House following his election, and shall end on the day before the first day of the next regular session, provided, however, that component societies may elect delegates for more than one term at any election. Each component society may elect one delegate for each 25 voting members in good standing, plus one delegate for one or more voting members in excess of multiples of 25, provided, however that each component society shall be entitled to at least one delegate regardless of the number of voting members it may have and that each multi-county society shall be entitled to the same number of delegates as its component societies would have had. The secretary of the society shall send a list of such delegates to the Secretary-Treasurer of this Association not later than 45 days before the next Annual Meeting. It shall be the obligation of a component society which elects delegates to serve more than one year, to provide the KMA Headquarters Office with a certified list of its delegates each year.

Section 12. The secretary of each component society shall keep a roster of its members and a list of non-affiliated licensed physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this State, and such other information as may be deemed necessary. He shall furnish an official report containing such information upon blanks supplied him for the purpose, to the Secretary-Treasurer of the Association, on the first day of January of each year or as soon thereafter as possible, and at the same time the dues accruing from the annual assessment are sent in. In keeping such roster the secretary shall note any change in the personnel of the profession by death or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

CHAPTER XIII. AMENDMENTS

Section 1. These bylaws may be amended at any session of the House of Delegates by a majority vote of the delegates present at that session, provided: (1) the amendment proposed is presented in writing to the delegates thirty days prior to the session, or, (2) the amendment is introduced in writing at a regular session of the House of Delegates and considered at the following session, the vote on said amendment having been postponed definitely for a period of at least one day.

Section 2. An amendment to or change in the bylaws may be proposed by a reference committee or by the Board of Trustees at the final session of the House of Delegates, but, not having been postponed definitely for a period of one day, requires a two-thirds vote.

Section 3. An amendment to these bylaws may be proposed in writing by an individual delegate at the final session of the House of Delegates. If such an amendment is proposed, the proposal will be postponed definitely and studied by the appropriate reference committee at that time, reporting their recommendation back to the House of Delegates before the final session is adjourned. Such an amendment having not been postponed definitely for a period of one day, requires a two-thirds vote.

1976-77 KMA COMMITTEES

ANNUAL MEETING ACTIVITIES

Scientific Program Committee

Richard F. Hench, M.D., Lexington, Chairman
Billy F. Andrews, M.D., Louisville
Peter C. Campbell, M.D., Louisville
E. C. Seeley, M.D., Lexington
Larry Kagan, Lexington
Paul J. Parks, M.D., Bowling Green
John P. Stewart, M.D., Frankfort

Scientific Exhibits Committee

Richard A. Kielar, M.D., Lexington, Chairman
John W. Ratliff, M.D., Lebanon
Jerry W. Seligman, M.D., Louisville

Awards Committee

Fred C. Rainey, M.D., Elizabethtown, Chairman
Lee C. Hess, M.D., Florence
Billy Gene Jackson, M.D., Mayfield
Edward N. Maxwell, M.D., Louisville
Wyatt Norvell, M.D., New Castle
George A. Sehlinger, M.D., Louisville

MEDICAL EDUCATION AND HOSPITALS

Continuing Medical Education Committee

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Rogers Q. Bailey, M.D., Danville
William M. Blalock, M.D., Paducah
Harry J. Cowherd, M.D., Frankfort
Kearney B. Daniel, M.D., Danville
Ellis A. Fuller, M.D., Louisville
Henry D. Garretson, M.D., Louisville
Stuart Graves, M.D., Louisville
D. Vertrees Hollingsworth, M.D., Georgetown
Patrick L. Jasper, M.D., Somerset
Frank R. Lemon, M.D., Lexington
Stephen C. Schindler, M.D., Lexington
Paul J. Sides, M.D., Lancaster
William J. Temple, M.D., Fort Mitchell
Sam H. Traughber, M.D., Hopkinsville
John M. Riley, Louisville

Cancer Committee

Laman A. Gray, Sr., M.D., Louisville, Chairman
William Christopherson, M.D., Louisville
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C. Hernandez, M.D., Frankfort
A. Joe Hiller, M.D., Lexington
Yosh Maruyama, M.D., Lexington
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Joseph Milburn, M.D., Madisonville
J. D. Miller, M.D., Harlan
Condict Moore, M.D., Louisville
Lynn L. Ogden, M.D., Louisville
Warren H. Proudfoot, M.D., Morehead
Ben F. Roach, M.D., Midway
Charles R. Sachatello, M.D., Lexington
George B. Sanders, M.D., Louisville
Karl H. Strand, M.D., Somerset
Paul G. Young, M.D., Lexington

Ex-Officio:

Mr. Wayne B. Miller
Jane Younger, R.N.

Maternal Mortality Study Committee

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Gordon D. Betts, M.D., Somerset
Glenn W. Bryant, M.D., Louisville
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John L. Duhring, Jr., M.D., Lexington
William D. Durham, M.D., Louisville
John N. Handley, M.D., Hodgenville
Byron N. Harrison, M.D., Owensboro
Jerry T. Hart, M.D., Hopkinsville
D. Vertrees Hollingsworth, M.D., Georgetown
Robert L. Houston, Jr., M.D., Eminence
Victor J. Magary, M.D., Ludlow
Terrell D. Mays, M.D., Elizabethtown
George C. McClain, M.D., Benton
Clarence J. McGruder, M.D., Henderson
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Charles R. Oberst, M.D., Louisville
John A. Petry, M.D., Louisville
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James F. Williamson, M.D., Ashland
Walter M. Wolfe, Jr., M.D., Louisville
Cary Vinson, Louisville

Committee on Mental Health-Mental Retardation

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Patrick P. Galla, M.D., Louisville
Joel Haffner, M.D., Henderson
Doyle Hagg, M.D., Frankfort
David T. Lewis, M.D., Elizabethtown
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Don E. Cloys, M.D., Richmond
Laszlo Makk, M.D., Louisville
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Esten S. Kimbel, M.D., Frankfort, Chairman	Internal Medicine
Raleigh R. Archer, M.D., Lexington	Plastic Surgery
Branham B. Baughman, M.D., Frankfort	Surgery
Walter R. Brewer, M.D., Lexington	Urology
Glenn W. Bryant, M.D., Louisville	OB-GYN
David W. Dorman, M.D., Louisville	ENT
Thomas J. Ferriell, Jr., M.D., Elizabethtown	Family Practice
Jeremiah Thomas Flowers, M.D., Louisville	Ophthalmology
Robert P. Goodman, M.D., Lexington	Orthopaedic Surgery
John A. Hemmer, M.D., Louisville	Surgery
William E. Hopkins, M.D., Louisville	Anesthesiology
N. Roger Jurich, M.D., Prestonsburg	Family Practice
C. Nicholas Kavanaugh, Jr., M.D., Lexington	Internal Medicine
C. Douglas LeNeave, M.D., Mayfield	Radiology
Laszlo Makk, M.D., Louisville	Pathology
John W. McClellan, M.D., Henderson	Family Practice
Willis P. McKee, M.D., Shelbyville	Surgery
John D. Noonan, M.D., Paducah	Neurosurgery
Nelson B. Rue, Jr., M.D., Bowling Green	Surgery
Richard J. Rust, M.D., Newport	Surgery
David L. Stewart, M.D., Louisville	Psychiatry
James G. Wilhite, M.D., Lexington	Pediatrics
Lloyd G. Yopp, M.D., Louisville	Internal Medicine

Committee on Occupational Health and Environmental Quality

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Fred E. Coy, Jr., M.D., Louisville
Stanley J. Cyran, M.D., Louisville
Abdulkader Dahhan, M.D., Harlan
Michael B. Flynn, M.D., Louisville
James G. Gulley, M.D., Madisonville
Maurice M. Hall, M.D., Paintsville
William F. Hawn, M.D., Louisville
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Thomas A. Kelley, Jr., M.D., Louisville
B. Frank Radmacher, M.D., Louisville
John E. Trevey, M.D., Lexington
Max E. Wheeler, M.D., Ashland
William R. Yates, M.D., Hebron

Physician-Attorney Liaison Committee

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Gordon L. Hyde, M.D., Lexington

KMA-Kentucky Nurses Association Joint Practice Committee

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Joseph P. Hamburg, M.D., Lexington
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Millard C. Loy, M.D., Columbia
James R. Schrand, M.D., Florence
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Mrs. Janice Owens, Louisville

Claims and Utilization Review Committee

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Thomas A. Watson, M.D., Louisville, Co-Chairman
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William E. Becknell, M.D., Manchester
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Eugene H. Conner, M.D., Louisville
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William H. Fields, D.D.S., Louisville
J. Roger Goodwin, M.D., Bowling Green
Gordon L. Hyde, M.D., Lexington
Thomas A. Kelley, Jr., M.D., Louisville
James T. Linville, M.D., Louisville
Lowell Martin, M.D., Martin
Roy J. Meckler, M.D., Louisville
William T. Moore, M.D., Bowling Green
John D. Noonan, M.D., Paducah
Lafayette G. Owen, M.D., Louisville
John W. Pate, M.D., Madisonville
John D. Perrine, M.D., Lexington
Frank R. Pitzer, M.D., Hopkinsville
William J. Sandman, M.D., Louisville
Edward L. Scofield, M.D., Louisville
Harvey R. St. Clair, M.D., Louisville
W. Eugene Sloan, M.D., Paducah
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Joseph G. Whelan, Jr., M.D., Louisville
A. Franklin White, M.D., Louisville



Big Balanced Rock, Chiricahua Mountains, Arizona (approx. 1,000 tons)

■ **Most Widely Prescribed**—Antivert is the most widely prescribed agent for the management of vertigo* associated with diseases affecting the vestibular system such as Menière's disease, labyrinthitis, and vestibular neuronitis.

■ **Relief of Nausea and Vomiting**—Antivert/25 can relieve the nausea and vomiting often associated with vertigo.*

■ **Dosage for Vertigo***—The usual adult dosage for Antivert/25 is one tablet t.i.d.

BRIEF SUMMARY OF PRESCRIBING INFORMATION

*INDICATIONS. Based on a review of this drug by the National Academy of Sciences—National Research Council and/or other information, FDA has classified the indications as follows:

Effective: Management of nausea and vomiting and dizziness associated with motion sickness.

Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.

Final classification of the less than effective indications requires further investigation.

CONTRAINDICATIONS. Administration of Antivert (meclizine HCl) during pregnancy or to women who may become pregnant is contraindicated in view of the teratogenic effect of the drug in rats.

The administration of meclizine to pregnant rats during the 12-15 day of gestation has produced cleft palate in the offspring. Limited studies using doses of over 100 mg./kg./day in rabbits and 10 mg./kg./day in pigs and monkeys did not show cleft palate. Congeners of meclizine have caused cleft palate in species other than the rat.

Meclizine HCl is contraindicated in individuals who have shown a previous hypersensitivity to it.

WARNINGS. Since drowsiness may, on occasion, occur with use of this drug, patients should be warned of this possibility and cautioned against driving a car or operating dangerous machinery.

Usage in Children: Clinical studies establishing safety and effectiveness in children have not been done; therefore, usage is not recommended in the pediatric age group.

Usage in Pregnancy: See "Contraindications."

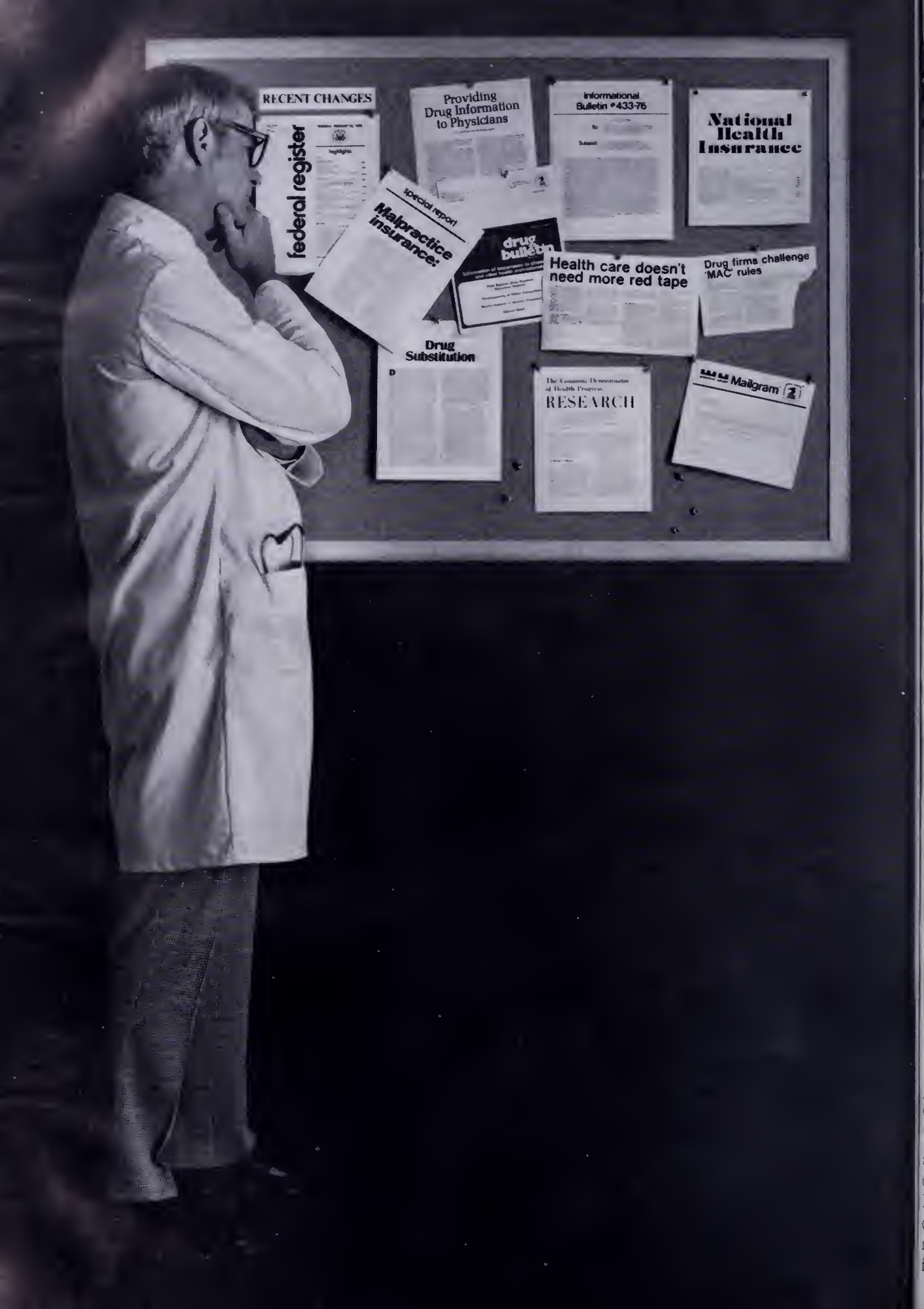
ADVERSE REACTIONS. Drowsiness, dry mouth and, on rare occasions, blurred vision have been reported.

More detailed professional information available on request.

ROERIG Pfizer
A division of Pfizer Pharmaceuticals
New York, New York 10017

Antivert®/25

(meclizine HCl) 25 mg. Tablets
for vertigo*


RECENT CHANGES
federal register
Providing Drug Information to Physicians
Informational Bulletin #433-76
National Health Insurance
special report
Malpractice insurance:
drug bulletin
Health care doesn't need more red tape
Drug firms challenge 'MAC' rules
Drug Substitution
RESEARCH
Mailgram

THERE ARE A LOT OF PEOPLE GETTING BETWEEN YOU AND YOUR PATIENT.

Medicine today is in the spotlight, subjected to all kinds of scrutiny. Your control over patient therapy is being monitored, judged and occasionally abrogated, sometimes by unknown third parties.

The worry is that in the wake of this focus, the relationship between you and your patient will be weakened, without offsetting benefits. Consider three examples:

Drug substitution In most states, pharmacy laws, regulations or professional custom stipulate that your non-generic prescriptions be filled with the precise products you prescribe. But in the last five years, a dozen or more State laws have been changed, permitting the pharmacist in most cases to select a product of the same generic drug to fill any prescription.

Ironically, this dilution of physician control has taken place against a background of growing evidence that purportedly equivalent drug products may be inequivalent, since neither present drug standards nor their enforcement are optimal. In fact, the FDA itself says it has not enforced the same standards for hundreds of "follow-on" products that it had applied to the original NDA approvals. Thus physician control over patient therapy is being eroded with a risk that patients may be exposed to drugs of uncertain quality.

The major advertised claim for substitution is reduced prescription prices for consumers. Yet no documentation of any significant savings has been produced.

MAC Maximum Allowable Cost, MAC for short, is a Federal regulation designed to cut the Government's drug bill by setting price ceilings for drugs dispensed to Medicare and Medicaid patients. Unless the prescriber certifies on the prescription that a particular product is medically necessary, the Government intends to pay only for the cost of the lowest-priced, purportedly-equivalent, generally-available product. The effect of the program may be that elderly and indigent patients will be restricted to products which someone in Washington believes are priced right. Practicing doctors will have little to say about administration of the program, since Government will have absolute authority to make its choices stick.

The drug lag The future of drug and device research depends upon a scientific and regulatory environment that encourages therapeutic innovations. The American pharmaceutical industry annually is spending more than $1 billion of its own funds and evaluating more than 1,200 investigational compounds in clinical research. Disease targets include cancer, atherosclerosis, viruses and central nervous system disorders, among others. But there is a major barrier to the flow of new drugs to your patients: The cost of the research is more than ten times what it was, per product, in 1962; and whereas governmental clearance of new drug applications took six months then, it commonly consumes two years now.

The FDA needs adequate time, of course, to consider data. But it is equally clear that the present approval process contributes to needless delay of needed therapy. That's why the increased efficiency of the drug approval process is vital to all our futures.

If these issues concern you, we suggest that you make your voice heard—among your colleagues and your representatives in State legislatures and in Washington.

It could make a difference in your practice tomorrow.



Pharmaceutical Manufacturers Association
1155 Fifteenth Street, N.W., Washington, D.C. 20005

LEGISLATIVE ACTIVITIES

Committee on National Legislative Activities

John P. Stewart, M.D.,
Frankfort, Chairman
Harold B. Barton, M.D.,
Corbin (Key Man for Congressman Carter)
James A. Baumgarten, M.D.,
Owensboro (Key Man for Congressman Natcher)
William J. Collis, M.D.,
Lexington (Key Man for Congressman Breckinridge)
Carl Cooper, Jr., M.D.,
Bedford (Key Man for Congressman Snyder)
William W. Hall, M.D.,
Owensboro (Key Man for Senator Ford)
Wally O. Montgomery, M.D.,
Paducah (Key Man for Congressman Hubbard)
Harvey A. Page, M.D.,
Pikeville (Key Man for Congressman Perkins)
Fred C. Rainey, M.D.,
Elizabethtown (Key Man for Senator Huddleston)
Samuel D. Weakley, M.D.,
Louisville (Key Man for Congressman Mazzoli)

Committee on State Legislative Activities

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Donald C. Barton, M.D., Corbin
John P. Broderson, M.D., Frankfort
William W. Hall, M.D., Owensboro
Lee C. Hess, M.D., Florence
Robert N. McLeod, Jr., M.D., Somerset
Wally O. Montgomery, M.D., Paducah
Harvey A. Page, M.D., Pikeville
C. Kenneth Peters, M.D., Jeffersontown
Fred C. Rainey, M.D., Elizabethtown
Samuel D. Weakley, M.D., Louisville
Paul J. Parks, M.D., Bowling Green
John P. Stewart, M.D., Frankfort
James B. Holloway, Jr., M.D., Lexington

GOVERNMENTAL MEDICAL SERVICES

Committee on Medicare and Other Governmental Medical Programs

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John M. Baird, M.D., Danville
George F. Brockman, M.D., Greenville
R. Kendall Brown, M.D., Georgetown
H. Burl Mack, M.D., Pewee Valley
Nelson B. Rue, M.D., Bowling Green
James L. Shumaker, M.D., Paducah
Robert E. Smith, M.D., Covington
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